[Type the document title]

[Type the document subtitle]

[Type the abstract of the document here. The abstract is typically a short summary of the contents of the document. Type the abstract of the document here. The abstract is typically a short summary of the contents of the document.]

Tshingombe tshitadi

autory

[Pick the date]

1.purpose .memo

1.A-A. /B.B. //CC. ///. DD////EE //////tra outcom A+B+C+D

1.A-A	B.B.	CC.	DD	EE	A+B+C+D+c
.VR1=IA×RA / Vout = - Vin0,6//IE=Ib+ic **VR2=(I1-I2)×R2/** **VB=R3×(I1-I2)R2/** **VR4=I2×4/**	Vout = - Vin0,6//IE=Ib+ic			Cu+2e---Cu 0,7 si	1.VR1=IA×RA / Vout = - Vin0,6//IE=Ib+ic VR2=(I1-I2)×R2/ VB=R3×(I1-I2)R2/ VR4=I2×4/ ... /////Cu+2e---Cu 0,7 si
2.ET= R1.I1+R2.I2+R3.I3 / ET = E1=E3 **ET=I1.R1+I.R2 /** **ET=I1.R1+ (I1-I2)R3/**	R=£×l÷a. R=£×l÷A	IC(sat)=Vcc÷RC	C=k×A×€o ÷d		2.ET= R1.I1+R2.I2+R3. I3 / ET = E1=E3 ET=I1.R1+I.R2/ ET=I1.R1+(I1-I2)R3/ /R=£×l÷a. ///IC(sat)=Vcc÷RC///R=£×l÷A ///// C=k×A×€o÷d
3.IT=√IR° +(IL-IC)°// R1÷R2=1+&0T1÷1+&T1	// Rt =To[1+&t].	RC= vcc-VCE÷IC, ///RB= Vcc-vbe÷ib	for=1÷2π√L .C		3.IT=√IR° +(IL-IC)°// R1÷R2=1+&0T1 ÷1+&T1

VT=√VR°+VL-VC// **Z2=√R°+L°-**		B= IC ÷IB			VT=√VR°+VL-VC// Z2=√R°+L°-C// // Rt =To[1+&t]. //// for=1÷2π√L.C /// RC= vcc-VCE÷IC, ///RB= Vcc-vbe÷ib B= IC ÷IB
4).XL= 2×π×f×L. / Is=IT-IC// **XC=2π×f×1÷2π×c/ A=π.d÷4//** **1÷To=1÷R1+1÷R2** **Rp2=1÷R4+1÷R5/. d=√4pcl÷πR**	///RB= Vcc-Vbe-ve÷ib Rbl=Rb2.(vcc-vb÷ib)÷ib Rbl= 1÷10, Re.vbe	N1÷N2=V1÷V2 //// Re= R1+R2(N1÷N2)			
5) 1÷Rp=1÷R2+1÷R3 / RC= Vc÷IC //) **Rs1= R1+Rp1** **Rp1= R4+R5÷R4÷R5**	V×R2÷Rc+R3	I1(R e× cos π+-xe×Sinπ	Ze= √ Re°+Xe°///// XL=Z2=Z3		5) 1÷Rp=1÷R2+1÷R3 / RC= Vc÷IC //) Rs1= R1+Rp1 Rp1= R4+R5÷R4÷R5/

					V×R2÷Rc+R3/// I1(R e× cos π+-xe×Sinπ. ///// Ze= √ Re°+Xe°///// XL=Z2=Z3/////
6).RSH=Im-Rm÷Ish/ **RSe=V÷Im-Rm**			VL= VP÷Z1.///// IL=√3×ip//// Pf=√3×IL×cos ///// V=4,44×Ns×pf		6).RSH=Im-Rm÷Ish/ RSe=V÷Im-Rm/ VL= VP÷Z1.///// IL=√3×ip//// Pf=√3×IL×cos //// / V=4,44×Ns×pf
7..E=e1+e2+e3../ **E= e×n ../** **1/Rp=1÷R1+1÷R2÷1÷R3/** **I=emf÷r.t/** **E÷r×n)+R** **V=I×R/** **RB = hxr, I=V÷R ,,** **Vo = I× RP** **IT= IA+IBc**	Y= m×N2÷N1.///// S=V×I×√3	S1.÷s2,zt=1÷1z1+1z			..E=e1+e2+e3../ E= e×n ../ 1/Rp=1÷R1+1÷R2÷1÷R3/ I=emf÷r.t/ E÷r×n)+R V=I×R/ RB = hxr, I=V÷R ,, Vo = I× RP IT= IA+IBc Y= m×N2÷N1.///// S=V×I×√3

					S=V×I×√3.//// S1.÷s2,zt=1÷1z1 +1z
8.)VRM=1÷√2 **VM=0,707** **VDC=2÷π** **I=0,318 ×Ia×z×p×¢.**	B=¢÷A,H=IN÷l F=B×L×I E=Δ¢÷Δt	E=B×L×V	IT= VC=I÷RC. £Integral V.b	XL=2×π ×f, XC =1÷2×π ×f, VC= IT(-jxc	8.)VRM=1÷√2.. / B=¢÷A,H=IN÷l// VM=0,707. / F=B×L×I // VDC=2÷π. / E=Δ¢÷Δt // I=0,318 ×Ia×z×p×¢. ./ E=B×L×V// IT= VC=I÷RC. £Integral V.b /// XL=2×π×f, XC =1÷2×π×f, VC= IT(-jxc
) 1÷2×Ia×z÷2P/ **IZ÷2c2p×40÷3 c /** **ATp=IZ÷2C2p× (1-40÷360)÷/**	V= K×Q×÷r// C=€r×Co×A/d// F=k×q1×q2÷r°/ / Ek=Q×V	XL= 2×π×f//// IL= v×I÷j×xl////	Z2=1÷hoe-hf÷h.e+Rs/// /// Z2=1÷ hoe/////		9) 1÷2×Ia×z÷2P/ IZ÷2c2p×40÷3c / ATp=IZ÷2C2p×(1 -40÷360)÷/ V= K×Q×÷r// C=€r×Co×A/d// F=k×q1×q2÷r°// Ek=Q×V// // XL= 2×π×f//// IL= v×I÷j×xl//// Z2=1÷hoe-

					hf÷h.e+Rs///// Z2=1÷ hoe/////
10.)N=v-Ia Ra÷k.¢/ Q= v×ɪ×d **B=u×o×l÷2×r/**					
Q =V÷d ,	C's=C1+C2 V=celerity×f	1÷C=1÷C1+1 ÷C2 1÷C=1÷C1+1 ÷C2,	AT=Q1=Q2 =V×C W=1÷×Q× V So=h×f×e× R×L÷n×e		Q =V÷d , /// 1÷C=1÷C1+1÷C 2 1÷C=1÷C1+1÷C 2, ///C's=C1+C2 V=celerity×f //AT=Q1=Q2=V× C W=1÷×Q×V So=h×f×e×R×L÷ n×e/// Zo=R×c×h /// RL//Z2=ZL. ///
13.) **NP÷NS=VS,/ m=EQ(V÷r)×Q** **emk=B×L×Vb/**	Qse=Qse=QT=Q 1=Q1Q /// Qp= Q1+Q2+Q Co = C1+C2	Z2=RB//Rb° T1=RbT/RbT			13.) NP÷NS=VS,/ m=EQ(V÷r)×Q emk=B×L×Vb/ ///Qse=Qse=QT= Q1=Q1Q /// Qp=

					Q1+Q2+Q Co = C1+C2 ///Z2=RB//Rb° T1=RbT/RbT
1÷ZT=1÷R-j(1÷XL-1÷xc)/////	IT=IR-j(iL-IC)/////	a+jb= √a°+b°/////			
£=ΔL÷L, , £=S÷E	Rt=A×e ° exp .Bt.// VA=R2÷R1+R2	L=AR÷R÷ΔL =R=resistivity	R÷teta= r(cos Teta+j sun Teta)//// f=1÷2π×√1÷Rc-R2÷L2,zd =K		£=ΔL÷L, , £=S÷E// L=AR÷R÷ΔL =R=resistivity ×L÷d// Rt=A×e ° exp .Bt.// VA=R2÷R1+R2 R÷teta= r(cos Teta+j sun Teta)//// f=1÷2π×√1÷Rc-R2÷L2,zd =K

16). tanπ=√3(P2-P1)÷P2+P2	V=w.×sin(π+Alpha	I=w×sin(π+alpha	ZT=VW<alpha÷Iw÷alpga		16). tanπ=√3(P2-P1)÷P2+P2//
					
					V=w.×sin(π+Alpha)///
					
					I=w×sin(π+alpha)////
					
					ZT=VW<alpha÷Iw÷alpga

17) Fr=1÷2π√LC Iaveg=I1+I2+I3+...In÷n	I rm÷wg=√i1°+i2°+i3+ ...in// f=1÷2π×√L.c				17) Fr=1÷2π√LC Iaveg=I1+I2+I3+ ...In÷n// I rm÷wg=√i1°+i2°

					+i3+ ...in// f=1÷2π×√L.c//
18). Vs =π int .b,a (y°1-y°2) **Am-y=into a b (rdA)**	n=2×π×Nr×(w-S)÷60×I×v ,	I2(I1+I3)Ra+ (I1+I2-I4°)×Ra+ (I3+I4) Rotor = (I1+I2)V-(I1+I2-I4)°	N generator = I×v÷Iv+Ia° ×Ra+Ra+Is ×v.I)		18). Vs =π int .b,a (y°1-y°2) Am-y=into a b (rdA) n=2×π×Nr×(w-S)÷60×I×v , Efficient=√I1÷I1 +I2 I2(I1+I3)Ra+ (I1+I2-I4°)×Ra+ (I3+I4) Rotor = (I1+I2)V-(I1+I2-I4)° Efficiency motor = N-(Ia°-Ra+ (Ia×v+Is×V÷IV) N generator = I×v÷Iv+Ia°×Ra+ Ra+Is×v.I)
19. C=Q.n√£×L÷2π // v(dropR)R	€=N.Δ¢÷Δt //. €=N.Δ¢÷Δt	(drop) L.I ./// I=Q1.I1 V= Vb-Va//. V(drop -total	Ta.alpha flux × Is) . EbO×flux× N×Z Efficient=output ÷inpout		19. C=Q.n√£×L÷2π// v(dropR)R €=N.Δ¢÷Δt //. V(drop) L.I ./// I=Q1.I1 V= Vb-Va//. V(drop -total ./// Ta.alpha flux ×

					Is) . EbO×flux×N×Z Efficient=output ÷inpout _____ _____ ____
20. vb-vA .Q÷€×d÷A.//	output /// Copper loss = I×T Efficient= 1-				20. vb-vA .Q÷€×d÷A.// z peak maximum Voltage input ÷output /// Copper loss = I×T Efficient= 1- losses ÷imput
.(derive partial .p÷ derive partial v)= **(Alpha.p ÷alpha .v) (alpha .p÷aplh a.t) /**	Iaveg=Vave÷r// VAve= V.ave÷r.l//	Line = VRY- ,VRY=VY B I1=IR-IR			21.(derive partial .p÷ derive partial v)= (Alpha.p ÷alpha .v) (alpha .p÷aplha.t) / Iaveg=Vave÷r// VAve= V.ave÷r.l// Line = VRY- ,VRY=VYB I1=IR-IR
22)_G(JW)//inte v2, V1..p×d×	R.T into v2.v1 .dv÷v ..//	n.1/n2= sin .π/sinπ			22)_G(JW)//inte v2, V1..p×d×v // R.T into

					v2.v1 .dv÷v ..// n.1/n2= sin .π/sinπ
23).P= m×R×T÷T/.	= s./// f= n×T÷2×l.		Z2√R2°+SXo°///		23).P= m×R×T÷T/. Eo÷v1=zr÷zs. I = s./// f= n×T÷2×l. //// Z2√R2°+SXo°///
24).T= 2 π, √ l÷g	F=^R).For.q1.q2				24).T= 2 π, √ l÷g // T= 2 π√m÷k.kg// F=^R).For.q1.q2 ÷R.R
25)..C.c÷f.m	m/// F=q2×E1				25)..C.c÷f.m =C.C÷F.m.c×v÷ m/// F=q2×E1 // _____ _____ ____ 26). Int.int.int x×y×z Dy Int 5. ,1. Int 1.2 into 3 0 [x °×y×Z

26). Int.int.int x×y×z Dy **Int 5. ,1. Int 1.2 into 3 0 [x °×y×Z**					
27)..Ns-N÷Ns//. R/2/// **R2=SX0**	///. VR= = VL×√3 ZBC=zAV=R÷#+jxl÷#///	÷#+jxl÷#/// VBC=I2×ZBC // VC= VBC+VR			27)..Ns- N÷Ns//. R/2/// R2=SX0 ///..xl/2 ///. VR= = VL×√3 ZBC=zAV=R÷#+jxl÷#/// VBC=I2×ZBC /// VC= VBC+VR///
28)P= √3×VL×IL×cos **S= √3×VL×Is/** **Er= I×zs**		Er= I×zs/ zS=Ra+jxs//// Er=IZs IRa			28)P= √3×VL×IL×cos/ Eph= er/ S= √3×VL×Is/ Er= I×zs/ zS=Ra+jxs//// Er=IZs IRa
30.). P=not (w-p)×9,81×π×D×n//	IR=V÷R IN=√x-coml°+ I y comp IN=	IN= IR+IR+It+IB _____ _____ _____			30.). P=not (w-p)×9,81×π×D×n// IR=V÷R IN=√x-coml°+ I y comp IN= IR+IR+It+IB _____ _____

					———
30.). P=not (w-p)×9,81×π×D×n	IR=V÷R IN=√x-coml°+ I y comp IN= IR+IR+It+IB				30.). P=not (w-p)×9,81×π×D×n// IR=V÷R IN=√x-coml°+ I y comp IN= IR+IR+It+IB _____ _____ ———
31).O= **Efficient max = k×s×cos©÷k×s×cis©+Po+k°ps**	F= N.P÷60///EP=E.L÷√3				31).O= Efficient max = k×s×cos©÷k×s×cis©+Po+k°ps/ F= N.P÷60///EP=E.L÷√3

32)
 	
d= E÷ 2kf×kd×kp×fz//
 	
Cos©=O÷s
	Mean = 3×√2÷h - vline	- vline ////
		
		= √2÷2×2π ×vrm÷(1+cos ©)////
		
		Vmean=√2÷π ×vdm×(1+cos alpha
			Vmean=√2 ÷π×vdm×(1+cos alpha)///
			
			Vmean = V× √3.√2÷2π< +(1+cos alpha)/// ,,R = T-T2÷p=1/t
					32)
					
					d= E÷ 2kf×kd×kp×fz//
					
					Cos©=O÷s//.vmax = √2×vrm //
					
					Mean = 3×√2÷h - vline ////
					
					= √2÷2×2π ×vrm÷(1+cos©)////
					
					Vmean=√2÷π×vdm×(1+cos alpha)///
					
					Vmean = V× √3.√2÷2π<+(1+cos alpha)/// ,,R=

					T-T2÷p=1/t//
33).T= 3×s×E0°/2×π× n (R2°+[S.Xo]°/ **A=B(ie exp I/t** **V=E.(I-#e-exp t/t)**	VD= vs ×(R1÷R1+R2 - R3÷R3+Rth)//) Vi= iL×R1×R2÷R2, =.	= Vo.R.m÷RM+ RT Vo= RC.dv1(t)÷dt= 1÷RC. Inte V1. (t).dt+dtvc(o			33).T= 3×s×E0°/2×π×n (R2°+[S.Xo]°/ A=B(ie exp I/t V=E.(I-#e-exp t/t) VD= vs ×(R1÷R1+R2 - R3÷R3+Rth)//) Vi= iL×R1×R2÷R2, =. Vo×R1/R2 = Vo.R.m÷RM+RT Vo= RC.dv1(t)÷dt=1÷ RC. Inte V1. (t).dt+dtvc(o)
Gma×Gms÷r°= Gms×Gms÷4×1 0 exo 8. **a=ΔV÷Δt,** **Speed = distance ÷timr** **V=u+V÷2**	V=u+V÷2,,// S=(u+V)// V=u+at // V° =u°+2as S°=u°+2as S=UT+1/2at° F=m×a	S=UT+1/2at° F=m×a F=m×g+m×g F=m×g-m×g			39). Gma×Gms÷r°=G ms×Gms÷4×10 exo 8. a=ΔV÷Δt, Speed = distance ÷timr V=u+V÷2,,// S=(u+V)// V=u+at // V° =u°+2as S°=u°+2as S=UT+1/2at°

					F=m×a F=m×g+m×g F=m×g-m×g _____ _____ ____
m1×u1+m2×u2 // **M1×.u1-m2×u2** **V= w×r //** **V=2×π×n×r÷60.** **V= π×n×D÷60** **D+(t+t)÷2 //** **Fe=T1-T2 //** **P-Fe×π×D÷60**	D÷4×4-π×d°÷4 V=π×D×n÷60 Belt velocity V= π×D×n nA×DA=nA×DA÷nB T=T=FX's L= f×cos Moment=L×M				m1×u1+m2×u2 // M1×.u1-m2×u2 V= w×r // V=2×π×n×r÷60. V= π×n×D÷60 D+(t+t)÷2 // Fe=T1-T2 // P-Fe×π×D÷60 // π.D÷4×4-π×d°÷4 V=π×D×n÷60 Belt velocity V= π×D×n nA×DA=nA×DA÷nB T=T=FX's L= f×cos Moment=L×M Equilibrium P×cos30°-
E1=T1-		Alpha= cp÷cv//			E1=T1- T2÷T1=100%//

T2÷T1=100%//
 	
P.v/ p=vRt÷m=V°
 	
n=w÷Q=2-T2÷T2×1000 //
 	
P1×V1÷T2=P2×V2÷T2; //
 	
Q=W=P1×V1×ln×V2÷v2 //
 	
SF=4,187lntf÷273. //
 	
T2÷T1=(P2÷P1).exp ,alpha-1÷alpha //
 	
W=P2×v1-P2×V2÷alpha-1 //
	P×V= m×R×T. //
	
	Q1=m1×C×Δt ,//
	
	Q=m×l×v//
	
	U=m×CV(T2-T2).//
	
	(V2÷v1)alpha = T1÷//
		W= m×R×t1×ln(P1÷P2)//
		
		(P1×V2)=(P2.×v)//
		
		f .exp 1=f×v÷v-v //
					P.v/p=vRt÷m=V°
					
					n=w÷Q=2-T2÷T2×1000 //
					
					P1×V1÷T2=P2×V2÷T2; //
					
					Q=W=P1×V1×ln×V2÷v2 //
					
					SF=4,187lntf÷273. //
					
					T2÷T1=(P2÷P1).exp ,alpha-1÷alpha //
					
					W=P2×v1-P2×V2÷alpha-1 //
					
					P×V= m×R×T. //
					
					Q1=m1×C×Δt ,//
					
					Q=m×l×v//
					
					U=m×CV(T2-T2).//
					
					(V2÷v1)alpha = T1÷//
					
					Alpha= cp÷cv//
					
					W= m×R×t1×ln(P1÷P2)//
					
					(P1×V2)=(P2.×v)//
					
					f .exp 1=f×v÷v-v //

.) ax+bx= **(p+x).(a×(p+x÷p×)+4(p+x÷p+x)** **[X.by×(p+y÷p+x**	2x××x+33x+xdx (a+b) exp 3= a.a+2a.ab+2ab.b+b.b				40.) ax+bx= (p+x).(a×(p+x÷p×)+4(p+x÷p+x) [X.by×(p+y÷p+x)

					2x×x+33x+xdx (a+b) exp 3= a.a +2a.ab+2ab.b+b. b (a+b)exp n= combination c n to n . a exp n-1+c
					41) F ®--- >[gain]--- >[op.Am]-->[DC motor ->-->. Tachometer ----------| --->[G(s)]-- >[G.p]-->©-- >[Gp(s)]-- >[G's(s)] -->©-- >[controle]-- >[power conver]-plan ® Intrusion --- [ideal sensor] ©-->®-->®--- >[G1]-->[G2]-- [G3] -->[G4]-->® [G5] .. [G6] ©-->©--- >[G1.G.2G.G4..]--- [G5]---

					------- H0---------- [G4]--- ------- H6---------- [G6]---
____42) **so=X1+x3+X5** **S1=x2+x3+x6+ x+x7** **S3=S4+X5+x6** **Input**	Input / output/ register X1,x2,x3,X4,X5,x 6,/S2,S1,s0/ select 0, 0,0,0,0,0,0,0,0,0, /0,0,0 1,1,1,1,1,1,1,1,1 ,1,1/1,1,				- _____ _____ ____42) so=X1+x3+X5 S1=x2+x3+x6+x +x7 S3=S4+X5+x6 Input / output/ register X1,x2,x3,X4,X5,x6 ,/S2,S1,s0/select 0, 0,0,0,0,0,0,0,0,0,/ 0,0,0 1,1,1,1,1,1,1,1,1, 1,1/1,1,1

Total value					

41) F ®--->[gain]--->[op.Am]-->[DC motor ->-->. Tachometer ----------|

--->[G(s)]-->[G.p]-->©-->[Gp(s)]-->[G's(s)]

-->©-->[controle]-->[power conver]-plan
® Intrusion --- [ideal sensor]

©-->®-->®--->[G1]-->[G2]--[G3] -->[G4]-->®
[G5]
.. [G6]
©-->©--->[G1.G.2G.G4..]---[G5]---
-------H0---------- [G4]---

-------H6---------- [G6]---

Purpose :

Trade to trading:
Basic trade theory fundamental design Requirements:
Construction trades composition:
Operationel trade low rules applier skill to skill ,, trade to trading
- 40. Sabs code of practice wiring premise Safety trade tools , safety I rules harss play machine building sign fire smoke , injuries fire hazard warning,cut space save damage of good is prevented.
- cell advance construction simple efficiency full load 976 silent operationel
Transfo little care :
-open -air cooling oil cooling,
- transformer assumed to have no loss et.
- secondary cell advance.
Rechargeable greater capacity than primary cells ideally suited emergency back a application la get life disadvantages more expensive than primary cells regularite maintence periodic charging traditionally less suited for portable application,
- code colour resistance : sketch IEC circuits carbon resistance potential variable capacitor ,zener diode ,pnl transitor battery cells unity polarization carbon extrinsic
- yoke ,poles sgoeas bushes backwards in the motor .
- moving brushes in generating poles field poles series .
- number of pairs of poles used .

- strength magnetic field.
- rate magnetic field .
- rate magnetic flux cut by the moving conductor,
- number of active conductor
- effective field flux reduce armature as load , generator.

41. Engineering drawings : welding PC aides draugtinf ,join metal
Free hand boxe screw thread ,
- arc welding gas welding resistance lap joint ,T joint career joint butt joint
Screws threads ,
- correct linework accuracy neat first angle orthopedagogic projections coupling projection machining .

-42.. generator ward Leonard motor generator system .
Shunt generator used where constant voltage is required.
- series generator a booster on DC line transmission line ..flux armature .

43 .trade domestic appliances .
- washing machine immersion water heater protection steel conduct pipe earth
44. Moving - iron instrument ,non linear scale measure DC and AC cheap robust affected by stray damping by air .

45. Moving - oil instrument linear scale measure only DC expensive very accurate damping edy ,

46. Convert AC generate output to a pulsating DC and act as , period time peak value cosinys
.47. illumination high pressure Mercure vapour discharge lamp ,siduim vapour discharge.
Cold cathode neon
- AC current theory, Serie RLC impedance phase ,
-48. three phase AC system wave supplies

-49. transformer secondary primary.
DC machine test conducted.
. switchgear and protected device :funci and operation induction.
-50. application of induction disc relay .
current and voltage break capacity of .
-51. reverse phase relay rotation of a three phase line they operate differente power level usually work by a solid
52. AC machine,
53. Measurements instrument electronics.
53 material used in manufacturing of semi conductor device.

54.Special characteristics :
Def . special arc furnace transformer power requirements.

55. Control system like all other components on electrical network allowed for process to monitored and regulated from a remote.

56. Special characteristics controle system operate environment controle system or overall electrical.
Static controle analogue .

57. Electrotech : principle nuclear positive Lenz lot directly proportional yoke download.
Type material algebraic sum EMF
- principal low change in the magnetic flux linking with .

- movement of conductor in a magnectic field.
- increase decrease of current circuit .
- carbon brushes, graphic
brushes ,electrographes, copper graphite.
Separately.
Efficiency full load ,97 moving silence magnetic circuit winding oil tank protection refrigerator,
-57.1 connecting electrical machines practical tips .
For connecting
-make sure you have rigth joint check size of logs .
-Make sure that you have a crimping .fit purpose joint.
* Installation core operate .
* Installation care and inspection of equipment locating t rigth tools for the jobs..
* Make sure that you know which equipment,keep your tools box organise stored your tools safety clean in good working..
* 57.2. Generation and supply of AC
* Power fact correction low power factor increase decrease electricity bill.

*Method of power correction capacitor basic generate another method of power factor synchronouse motor be set to operate in logging on leading.

* AC synchronouse machine synchronouse converted mechanical energy input induction machine.

* Load Brid connectioning charge series connect to shunt .
- speed and torque:
- torque and power:
Load sharing divider load .load among a set

to
TSHINGOMBEKB

50. Cpd continue learner
Calculus
Kirchoff,
e1 source, RLC Serie RLC ,i1,i2,

dq÷dt=1.//
L×d°1÷+R×di÷dt+1÷C=dv÷dt
(L1+L3)×d°i÷dt°+(R1+R3×di÷dt+
(C2+C3).i1-ld°i2÷dt-R×d1.2÷dt-
c3.12=e1(t) ///
(L2+L3)×d°i÷dt°+(R2+R3)×di3÷dt+
(c#+C3)i-L3×d°i#÷dy-R3×di÷dt-C3.I1=e2(t)
t=0 and t ,t = o,2
e1(t)=100 sin (120πt)...//

Contour symetry
Int .H×dl= sum n1.- n2.i2

-;a Di/dt detection circuit DC unidirectional breaker
di÷dt , V= R.i+ L×di÷dt
I=(v÷R)×(1-e(t/T),, differential the above value , diffential the above value Di/dt = (/l)
e the maxim , di÷dt , di÷ St) max = //

Potentiometer coefficient reducing voltage integration factor,sum integrator

dx÷dt. TV,,E=™L.dl÷dt ln +1÷c integral dt./
L.di÷dt+R.i+1÷c integral.1.dt=E
Rd÷L.dt+1÷Lc=d.y.÷dy
do=[f(x-y)St..
5dx÷dt+3x÷5=0 out put integraj dx÷ St = 3x÷5

_____
Δv2~ V20-V2=Rs.I2 cos alpha+xsIs2.sin..alph
√4Δv2=√3(RsI2.cos &2+X's.I2.sin &1/
_____&
f(x)..d÷dx ×f(x)../

d÷dx[f(x).g(x)]=f(x).(g)+f(x).g(gx)/
a(x+b÷2a)=a+x.x + b÷a+(8.b÷2a).(8.b÷2a)
A÷ax+b+B÷(ax+b)(ax+b)+...G÷(ax+b)n//
Firs second order

dy÷dx+Pay=Q
a.(d.dy)÷dx .x+ b.dy÷dx+cy= f(x).//
Volum.Δv π✓.y.yΔx
VX= π. Inte. b to a (X1. - x2) dyb..vy = 2π
X= Am-y÷A= into (a) .to b rdA÷A, //
(x,y)= f(t); g (t)

ds÷dt= v ,,dv÷dt=d.d.s÷dt//
  f(t)S= 40t-5.t.t
 f(t')=40-1,,0.t
,M

V= π.r.r.h//. r.r=L.L - h.h cone high
X.x + r.r=
R.R..V=1÷3.π.r.r.h
=1÷3.π(R.R-x.x)(x+R)
=1÷3π[R.Rx+R.R.R-x.x.x-Rx.x]
Partial differential
Z= x.z.z.y.t..
Lim .&v1÷&h=dv1÷dvh.
h---
Volume cylinder ,,,unit
Gravitation centroids..
x+y+z=1
Double integraj ,,single variable sum I.double,
Sum j f (x,y)
y=(x,u@),,,y = (x+§x)and Δy-y , u (x,u) total derivatives,

dy÷dx=dy÷du×.du÷dx.. partial constant

Inspection of work equipment :to indentify wether equipment can be operate maintened safety , deterioration ,
Check risk safety in case inspect where significant and safety installation, installat reinstallation deterioration or any other need for inspect frequency should .
- to operator and other equipment installation result
- work equipment that requires inspect inspection b,
- reg where the safety of work equipment depend .
- intervat equipment.

- wath should the insoy. Deoenyon type of work t use any manufacture recommanday the advit ,trade sourt

---

Load
Z total = ZC/)(ZL-UE)..
VA=S+VAR -------.S=P+Q//

---

gradient DE fonction
&f(x,y)÷&y=&÷&y,,

ln|x|+C
Int I/x

Equivalent transfo
E2= I2×z2+v2 //
E2-v2=I2×Z2..//
Vre%=E2.v2÷v2×100..
V reg%=I2.R2.cos$+I2.x2.sin$÷v×100

50.) Cpd development skills
Z=√R-(xl-xc)/
V=Z×I,
Z=R
P=R×I×I
V=U×√3
I=j×√3,
U=V÷√3
I=j×√3
J=I÷√3,
J=IL1, IL 2,
3R..,, R :3,3 xl = 22×π×L×f
XC=1÷2πcf
ZT=(1÷z1+1÷Z2+1÷Z3)..
    =G1+G2+G3)..1÷GR+1÷G2+1÷G3..

Engineering electrical load system
R.I.I=3×R×I×I,, R×I×I÷3,,
I=j,,
I=j×√3
Load = √3×R,,I=j,...
I=j×√3
P=R×(j×√3)
P=R×j×jx3
P=3.R.j.j
E=1÷R1+1÷R2×j×j×t
E=R1+R2×j×j×t
E=3×(1÷R1+1÷R2)×j×j×t..
E= Em×sin×w.t
E=j×3×R×j×j×d
Z=1÷Z1+1÷Z2+1÷Z3---
G1+G2+G3,,Z1+Z2+Z3
E= 3(Z1+Z2+Z3)(j.t)
E1=(1÷z1+1÷Z2+Z2)(j×t)
E1=(1÷Z2.1+1÷Z2.2+1÷Z3.3)(j×t)
E2= 1÷Z3.1+1÷Z3.2+1÷Z3.3(j×t)
ET=[1÷z1+1÷z2+1Z3(j×t)]×[(1÷z2.1+1÷Z2.2+1÷Z3.3)]×[1÷Z3.1+1÷Z3.2+1÷Z3.3](j×t)
[Z1+Z2+Z3(j×t)]×[Z2.1+Z2.2+Z2.3]×[Z3.1Z2+Z3.(j×t)]
ET=1÷Z1+1÷Z2+1÷Z3(j×j×t).×[Z2.1+Z2.2+Z2.2+Z2.3][j×j]×[Z3.2+Z3.2+Z3.3×(j×j.×t)..//

Serie LC ,,capacitor ,resistor load series parallel impedance low related

Evidence low energy
C=Q/4
..Q=u×.u×.c×w
Delta=Q=3×U×U×C×w
We=3×V×V×C×w
CV=3×cΔ

Ep=P×I.
E1+E2+E3..
Q= iron ,,Qin iron
I A,,IB+IC,,
Diagram fresnel ,,
In =I1+I2+I3,, alph=0,,V2N,,alpha =90!
Vector fresnel
I1=j1.2-J.3.1
I2=j2.3-j1.2
I3=j3.1-j2.3
I1+I2+I3=0
Delta balance
I=√3×j×
J1.2=U=z.1.3

V=u√3..IL=Iz ,,
VZ1=VZ2=VZ3..I=Z,I=IL=IL=V÷Z,,V=U÷√3.
IA=V÷<,Z=U÷Z √3..
IΔ=U÷Z×√3,,U.√3÷3.Z
Istar l = V÷z=u÷√3÷Z,,
I stars =u÷z×√3=u×√3÷3×z
Part= U×I×start×√3×cos alph ..

60. Engineering sinusoidal quantity sinusoidal
- Um× cos×(wt+j)..
- 1÷T.integral T.udt ,,u>2÷T.
u= u.o×2×cos(wt)
I= i.o2 cos(wt+j)
P=u.O×.cos w(wt)×Io#cos(wt+j)
=u.o2×I2×o×cos(w.t)×+(wt+j)
U.2 .Io2×cos(w.t)(wt).×(w.t.j)(w.t.j)
Layout fresnel
V1=Vo×2×cos(w.t)
V2=V×cos×(wt-2p/3)
V4=Vo2.cos(w-4/3)
.P=(U×I×cos)+U×.I ×cos(2wt+s)
K= P/s,,K=cosj.,A=V×I×sin
Cos(2wt+j)+cos(#wt+j-4p,cos wt+,j-8P/3..
-process high
I2.2= J3-j2, I 3 =j1-j3,,= Vk.3
-balance Pbskance ,
P= v2+v2.I2+v3..
V1= Vo2÷cos(wt)×i=io2×cos(wt+j)
V2=vo2×cos(wt-2p/3)
P1=V×I[cos j+ cos (2wt+j)
P2=v×i[cosj+cos(2wt+j8/3)
P<p<p1+p2+P3

Installation.cinnected load demand

S=P+jQ./.P=V×I×c0s//
A=V×i×sin@..√P.P+Q.Q
W=P×t
Demand factor = maximum demand ÷ connect.
Load factor= average load .

Applied engineering science skill mathematics : to master skill engineering

Part , questions//operational skill///resonning skill .
Total skill total number
Mandatory skill development,//
Engineering context challenge,analyse with guidence , design development, investigation guidelines exist
Basic knoy engineering key
-role engineering applications of civil mechy design implementation testing control system _ topic national simple system subsystem inoutb..
Application of low of conservation energy involving kinetic losses
-applied calculation involve work done and power ,Ew=FD,E/t ,Ek=1/2m.v.v,,EP= MGH, e= v.i.t,eh = = cm.Δ.t .
_ roles and discipline impact // social environment Engineering b,social economic impacted positive negative.
Description of function circuit in term input process and output.
- concept current voltage measure ,,calculau involving relation voltage low involved resistance Serie parallel bdivider of operationel fixed voltage ,voltage divider to generated a signal
- transistor resistance electronics , functionalite of relay protection in explanation function of electronic a variable voltage divider transistor relay output,.
-applying algebraic skill to linear equations bsolving linear equations the subject formuler,explanat draw graph of value for choses value ..
Conducting asssessment judging evidence marked and cerife quality assurance,re asssessor.
Question ,point process accuracy ,expected response correct answer award,correct additional,evidence divisyub overall strategy,level 5,4

Applied to applied applied skill to resolve skill physic mathematics to skill electrical panel :///

Principle operationel connection : basic transfib,threet phase advantage application calculation

Circuit ,power ,source protection device components,
-_____
Electrical infrastructure construction
fundamt compulsy,electrical principle practice ,workshop practical , physical science electrical , electronics industrial ,math ,life orientation level 2,4
Career work power station electricial
- electricial system construction fault AC,DC ,t opic operate..
Introduct to policy theory policing practice v.literscyb,office data processing to

-Applied skill .to trade and trade to applied skill thermal compo

_____
Applied..

Cpd.
Installation motor three phase , 3bulb
Power factor.
Qph1=uph1×Iph1×sin @1=>
Qph2=uph2×Iph2×sin@2=
Qoh3=uph3×iph3×sin@3=
QT=Qph2+Qph2+Qph3.
Determine impedance.
Ph1=uph,1ph,1,cos
Ph2=uph2×cos×ph3.
P= ph1+ph2+ph4..
Equilibrium
Vab+Zs.ib=vab+ZsIa
VB+zS.Ic=Vbc+Zs.ib
VCA+ZsIa=VCs
Vab=vbc=vca=IB=IC=I
Za=zb=,Zo
Wa=Vab×Ia[cos(30°+q)]
WC=Vab×Uc[cos(39-q)
Wa+wc=va.ia[30+q)]+vbcI [cos(39°+q)
Wa+WC=vl.×il[cos3o+q)+(cos30)
Wa+wcvl.il (2cos39cosq)=ox3×v×ipf

-dephasage ,129,2,4,6poles.
V1(t)=Vmax cos wt/

V2(t)=vmax cos(wt+3o)

V3(t)=Vmax cos +(wt+60)
V4(t)=Vmax(wt+90)

dv1(t)=integral .dv max ×cos w.t
dv2(t)= integral dv max× cos (wt+3o°)
dv3(t)=integral dmax cos (wt+60).
dv4(St)=integral max cos (wt+60)

Installation generator g1,2 ,transfib kWh , back ,,retard ,avant , clockwise
a+bi .x+in,,complext real power factor ,apparent power factor
Cable line a+BJ,line impedance xj resistance capacity parallel connection cable phase beutraj ,power between phase phase impedance a+BJ ,,line 2,3a+bi,,line neutral a+bi,,
Construction vector fresnel flech robot scater drawing vector quantity phase a,b,c ,,
_____cpd

applie to trade ,,and trade to applied safety ,percentage correct

Applied trade test to trade company theoretical mathematics trade theory relevant trade test on the job supervisor
Commision
Tender value point relate years expert certified trade,10point clear time frame ,clear project plan time plan responsible of team , equipmt workshop
Log book apprenticeship

Module trade to trade skill report phase trade ,1,2,3trade test,module code ,ovject,criteria tendered
Safety area join crimping fault,,
Db fuse AC ,motor contruj retain fault fault applicable to oanrk fluirencr ,isolator ,wat unclud rack flexible conduct
- code man power kefit, not dry joint no damage nibsolder all safety adhere testing instruments comductur 'cabkevmake off PVC armoured up to 16 mmm core 1200v lug join rating correct ovx
- objectivjty relevant colour marking correct sabs caractere GAZ welding piece nozke GAZ lifting,.chain ton max work not exce selected readings all safety applied
,- criteria recall type battery percentage parallel correct manufacte system fit component procedure ...
El1 electronic components wire watt carbon metal oxide thyristor 1construction solder..
-correct according manufacture adhere procedure cambdr correct test average value peak frequency RMS ,
Control main circuit line start dejtad phase rotation,
Cad xlpe cable 2099!test gears ,,

_____
Cpd learner technical.
equivenlent electrical hydraulic ..
Integral countiur infinitive

Stock Maxwell

50)cpd
Engineering
-basic concept introduct discovery: voltage electrical current resistance power, conductor between line
U=√3.uph
- key term
: law regulation ohm low state I= u÷ib,
-Kirchoff low: sum bode junction in sum of current node n I1+I2+I+3(-,i4-I5.
Coulomb low :charge |F1|=|F2|=KE.|q1×q2.
-Right hand rules thum point direct point reminder finger field ,direction wire
First left hand magnetic induction second left hand left magnetic
- resistors connection schema ,Serie connection /,parallel //connection
Amperage I1=I2=3,, // I1,2=I1+I2
Voltage U1,2=u1+U2//U1,2=U2=U
Resistance /R1=R1+R2//1/RR1=1÷R1=1÷R2
-Joule Lenz ,Q=I.U×R×t
Amount heater
-capacitor connection
Scheme ,/serial connection //parallel
Electric charge ,q1,2=q1=q2//q1,Q,2=q1+q2
Voltage /u1,2=U1+U2//U1,2=U1=U3
Capacitance /1/C1,2=1÷C1+1÷C2
-ligthing .
Incandescent light type ligth /ligth socket base //lumen lux///color temperature////led start
Electrical ligth construction glass inert tungsten support ,electricligth order filament oxydatiin .
Manufacture 1,5 volt principal heating power / incandescent lamp source fluorescent lamp, halogen lamp ,#00-409 lamp ligth ,dischylamo service///ligth socket onde noise
device ,E27,G4///lumen device total from////color temoera.
- cable and wire
Wire color/ type of cable onde wire//wire connector///
IEC 60446 basic saftma. Power marking
IEC 60442007,2019IEC 60444
L1: brain Gray ,// cable jacket ,wire coaxial cable signal cable flexible filled heliax non metallic ribon cable insulator ,stripe /// Zone special danger soldering screw terminal ,4 wire nut terminal block bolted wire connector
- db
- power station and substation electrical substat.
Nuclear power: no install energy schema of operationel
Plan thermal power : generate electricak energy by converty chemical, hydraulic power wind ,geothermaj
-boiler turbine power combine cycle / spp solar power plan is on engineering structure verting radiation ponek ,Vacuum tower type ,/wind power Serie connected osgir coak
- electrical measure:
-Volmetre instri use mesure analogic principal electromechanic,AC DC pulse selected,
-ammeter device for current ,
- ohnneter device ,
Multiple measure functionalite analogic Dmm,
Clamp meter device operation based 10kv,,
Electricitt meter device measure electric energy install ,2,5:0,5:
- mechanical energy : transformer static device convert AC ,expansion
insulator ,transform ,convert ,
Motor electrical energy operator shaft.-
generstor convert mechanical energy from AC power solar
- ground system electrical engineering
DC ,isolation ,n neutsj, potential
- Protection and automation device:circuit breaker,rcd,rcbo,sod,voltage monitor, magnetic,fuse,
- socket repair/ installation of build // installation the surface mounted socket ///switch installation
/Conche or brick,
1)make a Chanel for cable router installat junction,2 fill the recession labell,fill the remaining,drywall marking drill hide back connect,
// Fix the base to the wall cable into the base , connect fix the sock install,///
Make the Chanel for cable mounted installation the junction with alabase mirror install fill remayb ,,
-over voltage: l2 and l3 sum voltage u1+U2=389,P1+P2,
/IP code. IEC en 60528/ / time current character time (1,13In /// tools work wide socket
-Schem electronics circuit
Switch (1and ,2 button,switch (3), pass through switch ,two key
pass ,socket ,socket ,dimer ,motion sensor ,impulse relay motor connection,electricity
- electricity cost calculator,device power used , daily use time ,price for kWh cost per hour month days week

---

Cpd ..basic electrical continue
I1=V2÷|ztotal|<- teta
I2=V2÷ztotaj<(-120°-teta)
I3=V3÷Ztotak<(120°-teta)
V1.2=v1-v2=(VLN<O°)-(VLN<120°)
V2.3=V2-V3=(VLN<120°)-+VLN<120°)
=√3.VLn< -90°=√3.V phase V2
V3.1=V3-V1=(VLN<120°)-(VLN<0°

=V3=.Vln<(30°-tets)-(Vln<o
I1.2=V.1.2÷Z<(30°-reta), I3=V2.3÷zA<(89-o),
I3.1°V×3÷Z.a
I.3.#=v.3÷ZA<150.
I1=U..,I1.2-I@.2<129,v3.I2.phaae 3+39°=

Advanced system diagram on line
Design draw breaker type .v max.max

R=Z÷√x.x÷R.R+1,
X=x÷R×R,
Full load no load losses ,phase fault,I3,phase
I3phasrE÷X, ILG,,
I÷XS=1÷x+1:x+1÷x=3÷x,,
1÷RS=1÷R1+1÷R2+1+R3=3
X's=x÷3,, xs÷Rs=xR= gen ,x÷R, symetrical b

Voltage system power ,Q=P2×tan veta

Cpd,
theory experimental,
Task lab sign domestic and industrial
Engineering lab electrical workshop.
Power systems.: electrical shop tools on precautions practical is discipline study design
- application equipment systeme
- solid bar copper wire
Awg, 10tp49,
Normal diameter 2,6to 0,76,cross section 5,39.
-assignment load calculation.
Application appliance / unity //power rating /// rating ////daily usage /energy consumption.
Fridge tvfan.

-lab electrical standard wire size..18aw to 1,
Assessment wath is gauge of wire used exercise b..
C=<1÷36.lin
./_____
Engineering studies practice 240 ,month n diploma NQF

Applie saqa to isat
Practical purpose Isat,scope mark off basic engineering,topic operate and monitoring grinder machine
Produced simple
Sub task , activities time frame
Manufacture size,time ,marks
Resource requie.

National
Where appropriate material undertaking .
Labels.

cpd ,gov body insurance
applie to applied trade to trade

Qualifications framework equivenlent
Assessment frame.
National diploma engineering.credit accreditation,policy criteria minimum maximum ,,
Equivenlent trade license: to trade license translate ..award equivalent
Divide job ,divide task ,divide operational equivenlent
Phase preliminary phase final ,semi final
Time competition ,cycle recycle permeant limited continuity function hand book

-Material strength test material

-Scale ,module word
Interpretation drawing scale drawing interpretation, building
Geodesie 1/100, 1/10, projection reduce size mass rules relate rules re projection planer scape
Scater ,flow shoot

Cpd : body qualifications framework

Statement of work experience

Log book , instruction programme national , level
Calcul evaluation equivalente
Credit entry credit exhibition outcom years // evidence
Experiemental 3years equivenlent ÷
Comparability psychometric :
Calculate time table ÷
Id calcule: calculate NQF level 360 credit .
Qcto group calcul evidence group qualifications:

6years ÷2years =3 years equivenlente
Frame job years:
Framework handbook . quotatien intellectuel.
Credit entry 360:÷credit 180÷=2 credit awardc,percentage evaluation 50÷100=2.
Level
Studies engineering.
-Work where appropriate a applying lubrificT correct assembly ,to assembly in accordance with specific,standard operate:

-where appropriate applying packing and or sealing material in accordance with specifications operate procedure :

-inspecting and checking the final assembly for conformance to specification.1th,2,th

-where apprit returning the final assembly to use :1th,2th,3th,4th,

-diagnose and repairs analogie equipment and components date sign .look for evidence confirm skill .:

-Diagnose and repair and skill :

-Obtaining and following relevant circuit diagrams Manuel specific schematic: maintenance ,:

-locating reading recording and diagnostic buil in fault .:

- obtaining error code interpretation documents running test functionnning and recording fault and equipmentb built test .:

-Checking electronics equipment sub assemblies:

-Component connection and termination for conformance to specific .

- removing and replacing component :

-recording results of test understaking on electronics equipment:

:Isolating electronics assembly from the power .:
-adjusti g turning and calibrating electronic equipment sub assembly.:
Returning to service and testing to specification the repaired electronic equipment sub assembly..
- using language and literacy skills to provide brief report record result of test,
Reproduction fault symptom and verify fault using appropriate test.
-Retiring repairs,maintain service,look for evidence skill :
-Look for evidence relevant circuit diagrams manual mainteecird supplier.:
- maintenance error code interpretation documents running test funct and fault and equipment status indicated built in test checking electronics component .:
- interpret technical drawing look for evidence skill in checking the drawing again job requirements related ,procedure interpreting job chart ,docuy checking and clarifu task relate :
Undertaking numerical operation geometry date sign
-checking materuaj exist:
- making termination ,: connection to specific manufacture and regulatory , adjustable marking tagging and calling wire conductor and connection to specification ,:
-connection using language and literacy skill to complete and routine information written job instruction .

-Using measure for checking connection and components binstall and test electrical wiring .

Code trade : job specification pertaining system operating and relevant plant personal with respect identify deflecting control fault deflecting in the control for correct loop corect operate:
- relevant pneumatic electronic circuit.

Diagram .testing monitoring recording resnse control system .using appropriate fault diagnosis technical procedure

_____
Methode resolve equation ,
no phass mesureing and measuring evaluation,, 1th,2th,3th,4th
Fault find low Kirchoff: find currentlooki g evidence circuit diagram labal ..

calculation loop sum .. equation:
E1-E2=I1×R1+I2R2+R3I3
E2-E3=I1×R1+I2R2+R3.i3 fund knowledge value
.
_ phase step lreleass unity competency package

Cpd: qualifications
electrotechnology
-mounte and wire control equipment
Package performance,evidence requirements ,applying labelling and numbering to cables and using termi number in accordance indystryev, occupation health and safety ohs and wirksb deal unplanned procedure,selectbswutch heard and control wiring schematic ,,

_____
-undetstand electrical wiring labeling doblabek code non metal conduct body partiebmean insulated conductubgb
Indicate size gaugeb,voltage rating wire size,GB,wGbmateriaiv

Qualifications: criteria score description tools :

excellent termination:
Learner outcom testing completed:
14-2g : two insulator ground 14,, maximum 600volub,
- underground cable feeder inside wall if burial in ground,
- install conduit bplastic insulation,T:thermoplastic ,h eater ,w,x,nylon, synthetic,c ,rules doorbligthung ,buried PVC ,low voltage inch ,
-maintance repare planned measure instrument components ,
Diagnostic and repaired documents

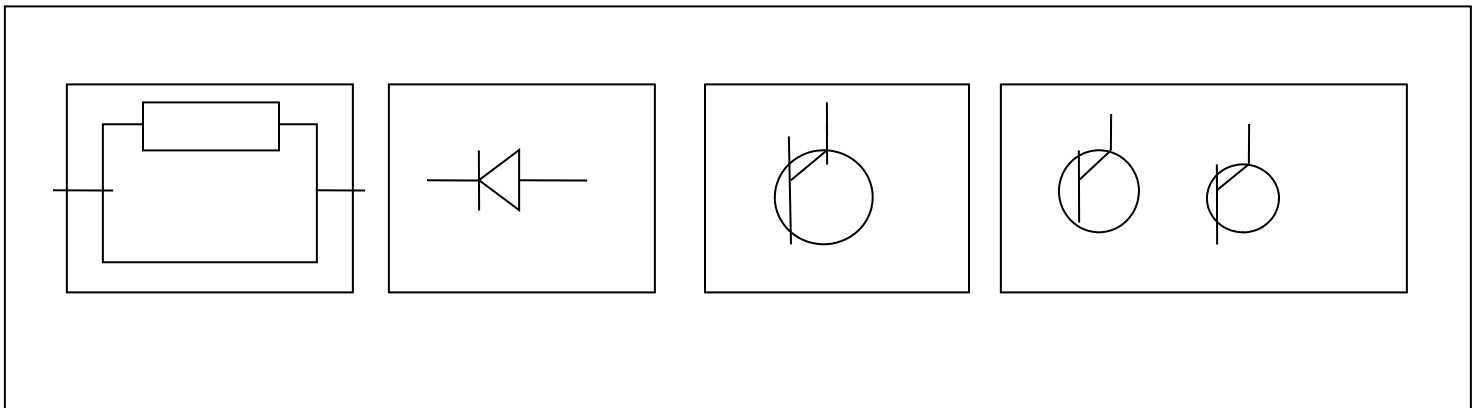
-,procedure component approprieb system. director.
Manufacture test review and approval before report .
Responsibility: originator is responsive written document .
Obtaining a DC number , priority to DRC routing
- material requirements are identify :
Description skill knowledge look for evidence confirm skills yes or not:
- checking nthe drawing agoing job requirements in accordance yes it note operating ,where appropriate procedure charter list and other applications yes or not ,refere documents,check clarity test ,operation geometry and calculation formulae,object represented in the drawing,unit of measure bin presentation drawing ,action to understand in response ,material from which the objet made hazard
-:base assembly drawing us identify work relationship..
-relatuoj contains.
-installatuon drawing: provide compagnj position, exposure diagram .
-Schematic assembly drawing: pictures..machine drawing

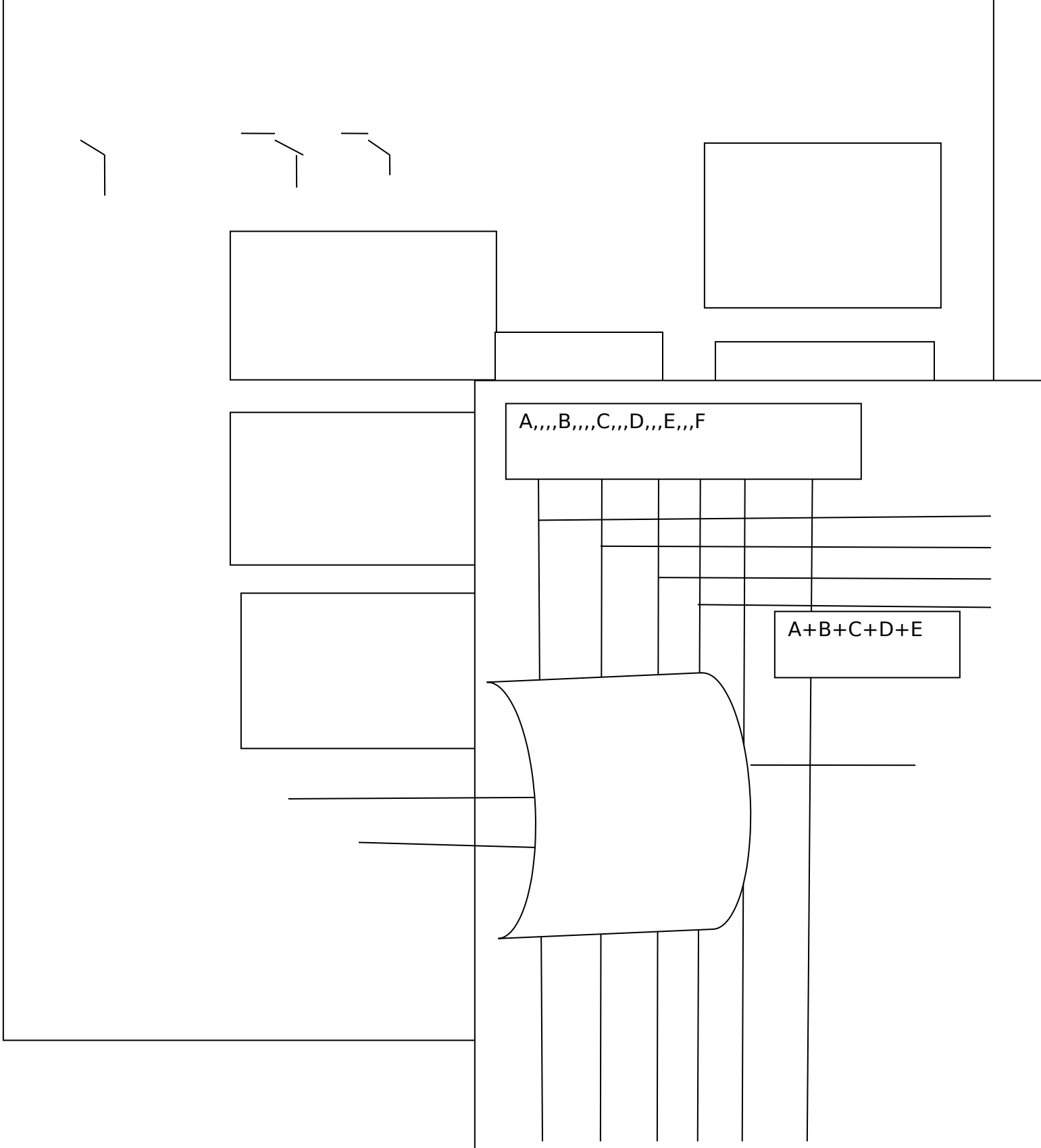
_____
Manufacture and inspection contractor final inspection nteat quality plan document b,docuy record and information of inspection testing evidence confusioning acceptance . checking product used quality random check listed pulling nxhexjing verifying brequireb,shipper

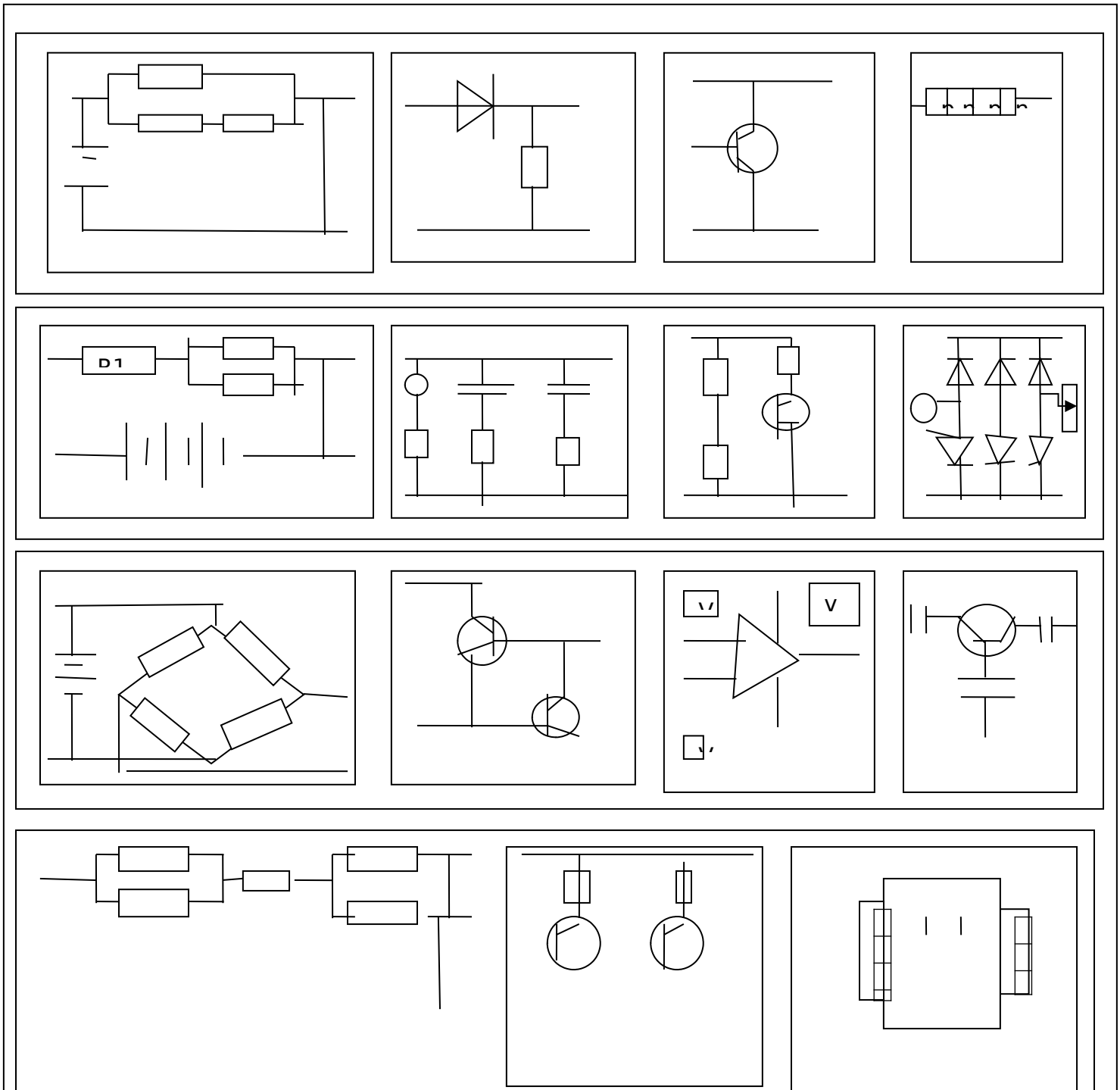
_____
Apply where appropriate apply job research hiring compagny piece by piece variable including b, understand quality defect non conforming borior next assembly determination producti
Electronic

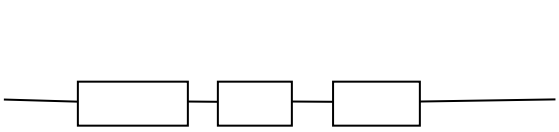
.cpd: qualifications integrity body
.- undertake material ,cable laalling
Conductivity resistivity labaled
-Thermo Cooper insulation :
Correct formulae task:
R=resistivity ×lenght ÷acros section.diameter length gauge.
Module young , dielectric test
Material elasticity plastic
Matter
GAZ :Liquide ,solide ,gaz

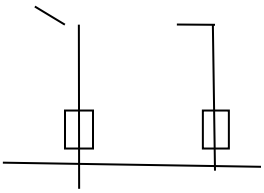
Q=.permeability insulator.
-Chemical PVC polymer vynic coutch ,ch.molding job appropriet.
Q=i.×u.×t...test
Q=m.×c .×tΔ

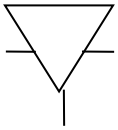


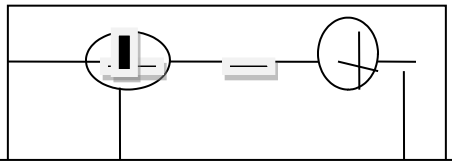

A,,,,B,,,,C,,,D,,,E,,,F
A+B+C+D+E

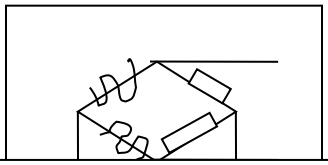

R1

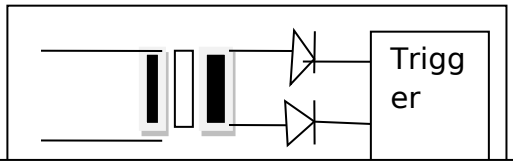


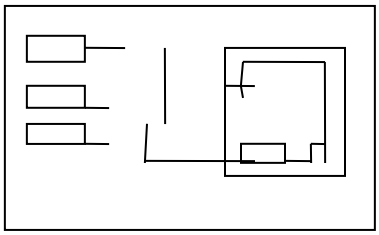


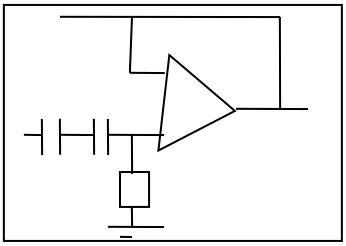


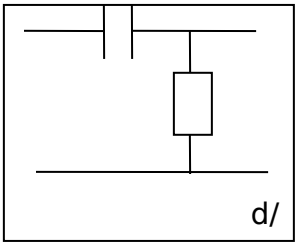


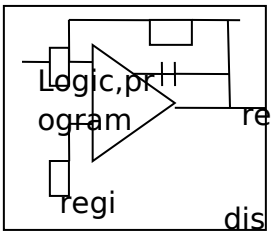


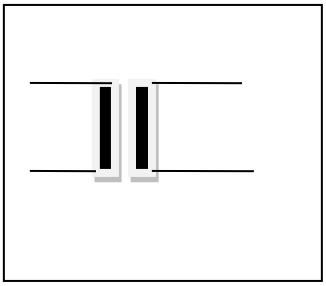


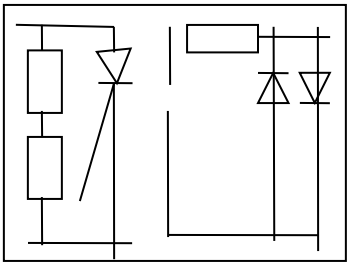


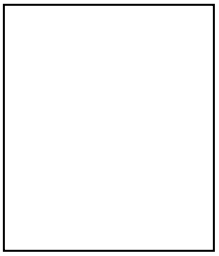


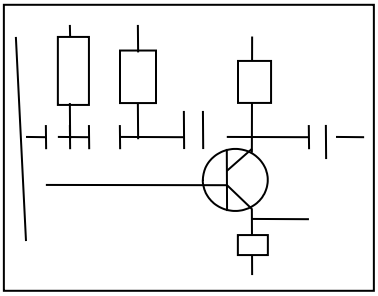


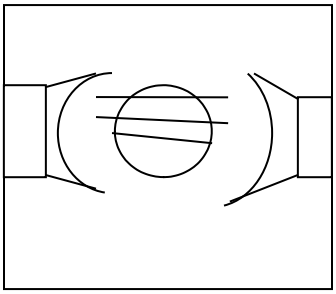


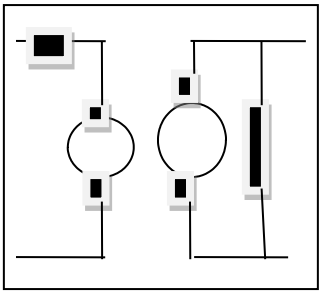


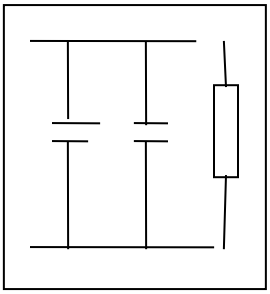


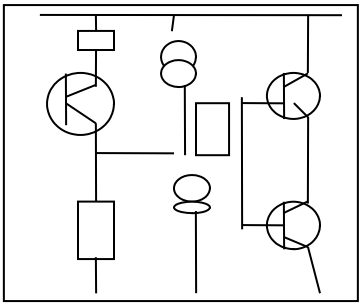


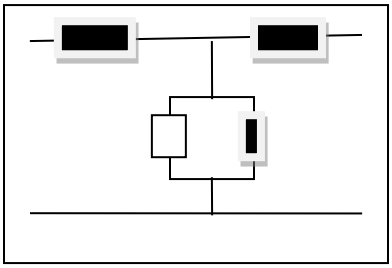






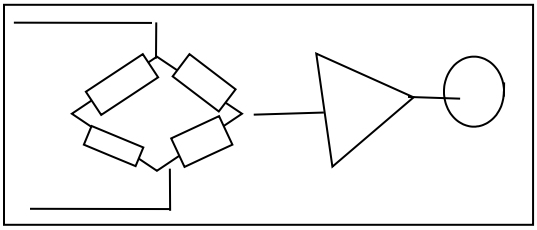




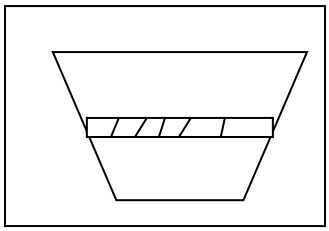
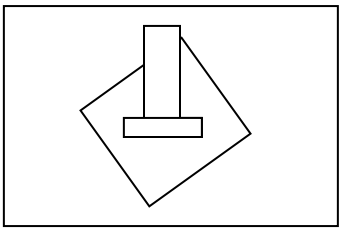
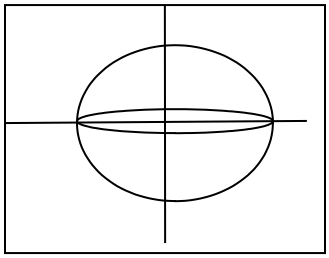
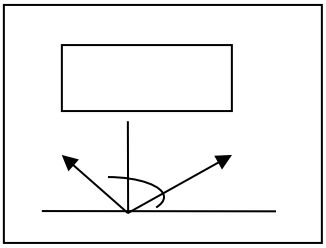
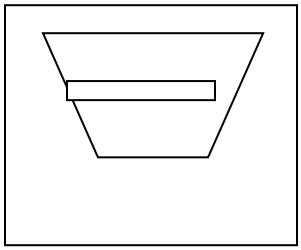
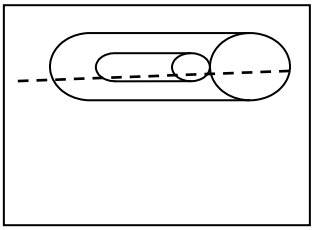
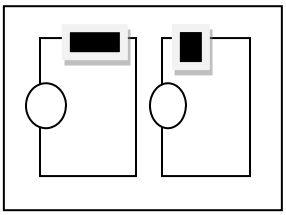
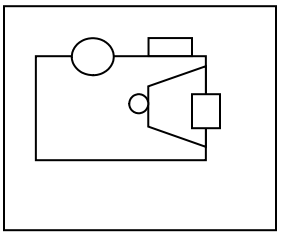
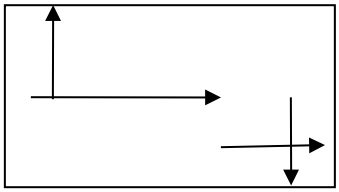
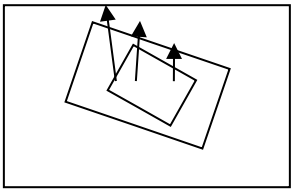
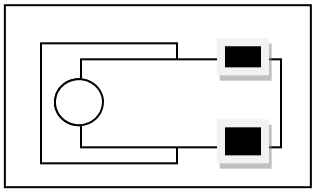
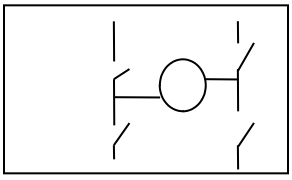
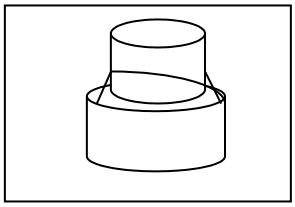
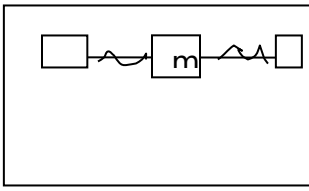


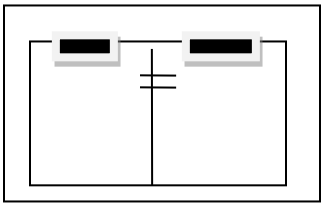
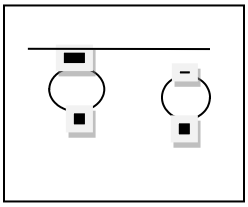
Scmitt,trigg
er

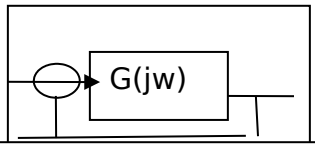
And gate

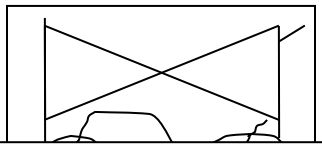


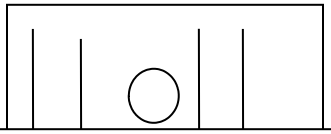
counter	Red raw
oscillator	Time ock

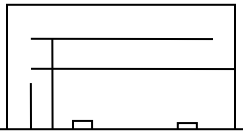





















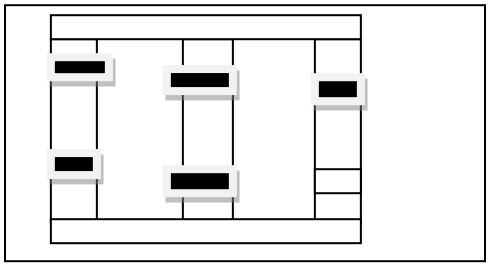


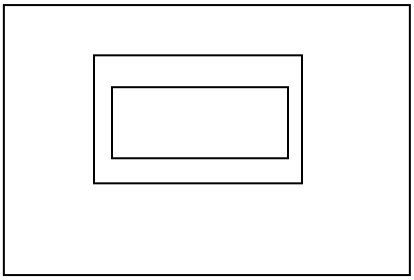
Manangem
ent

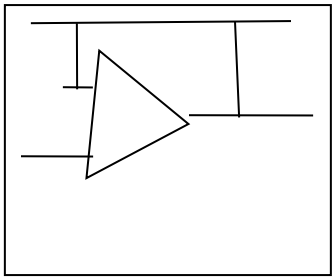
executive

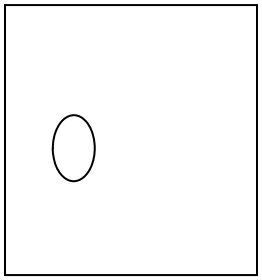
Decis
sion

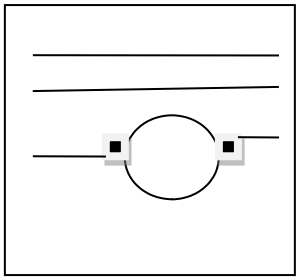
Transaction



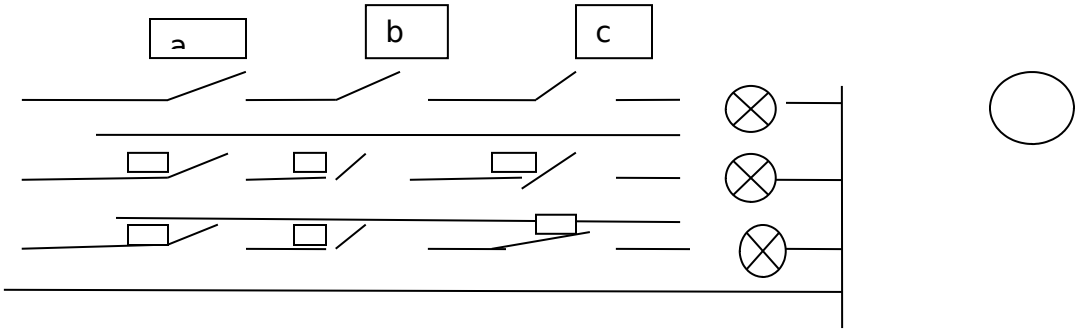








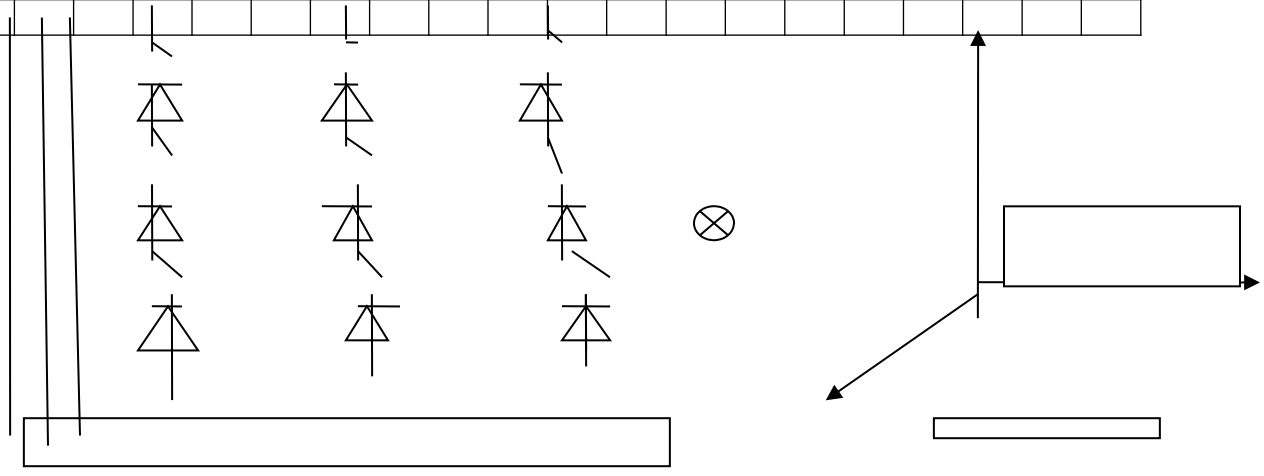
Design career technologie

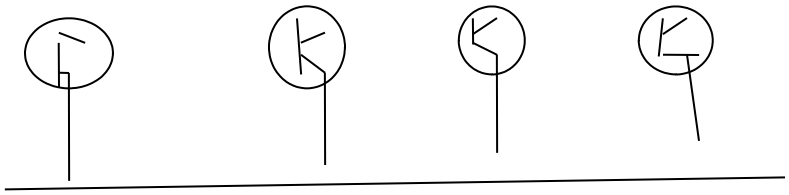


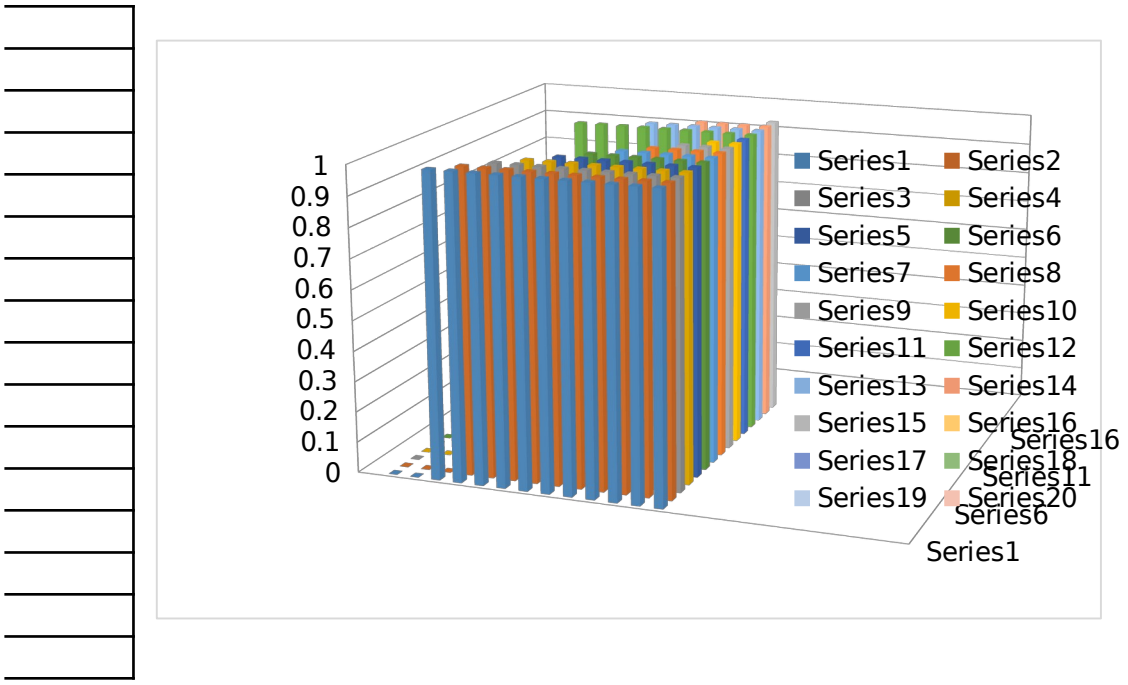
a	b	c	d	e	f	g	h	i	j	k	L 1	L 2	L 3	L 4	D 1	D 2	D 3	D 4	m
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0					
1	1	1	0	0	0	0	0	0	0	0	1	0	0	0					
1	1	1	1	0	0	0	0	0	0	0	1	0	0	0					
1	1	1	1	1	0	0	0	0	0	0	1	0	0	0					
1	1	1	1	1	1	0	0	0	0	0	1	1	0	0					
1	1	1	1	1	1	1	0	0	0	0	1	1		0					
1	1	1	1	1	1	1	1	0	0	0	1	1	1	0					
1	1	1	1	1	1	1	1	1	0	0	1	1	1	0					
1	1	1	1	1	1	1	1	1	1	0	1	1	1	0					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					

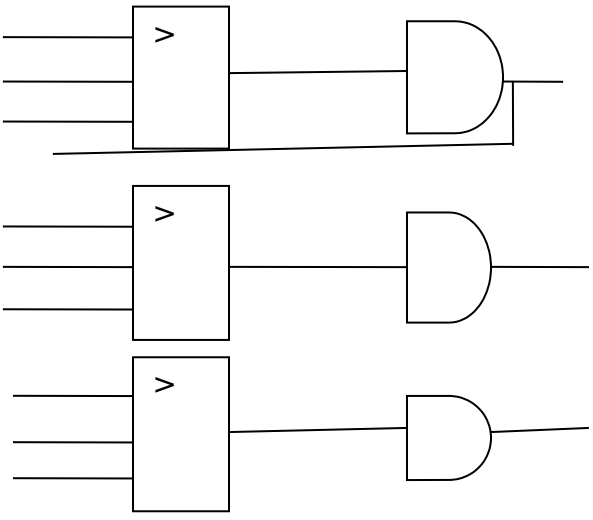
Design education electrotechnologie activity task module switch

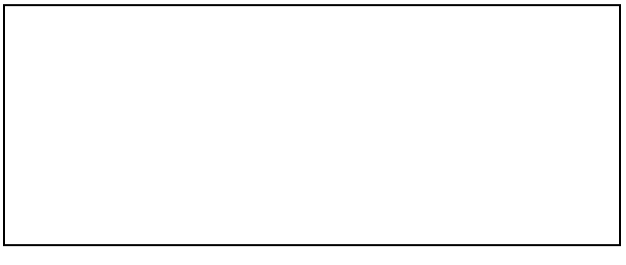
a x	b x	c x	d x	e x	fx	g x	h x	ix	jx	k x	L 1	L 2	L 3	L 4					
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0					
1	1	1	0	0	0	0	0	0	0	0	1	0	0	0					
1	1	1	1	0	0	0	0	0	0	0	1	0	0	0					
1	1	1	1	1	0	0	0	0	0	0	1	0	0	0					
1	1	1	1	1	1	0	0	0	0	0	1	1	0	0					
1	1	1	1	1	1	1	0	0	0	0	1	1		0					
1	1	1	1	1	1	1	1	0	0	0	1	1	1	0					
1	1	1	1	1	1	1	1	1	0	0	1	1	1	0					
1	1	1	1	1	1	1	1	1	1	0	1	1	1	0					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					

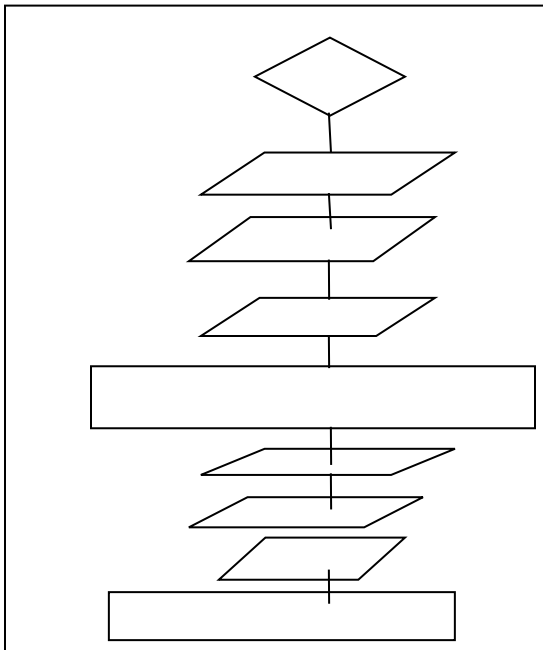


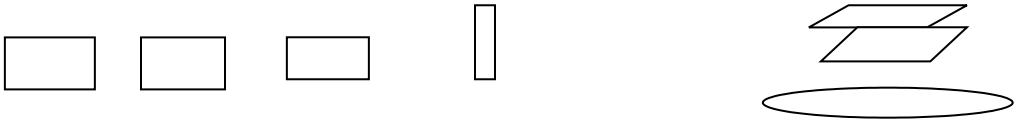



1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Series1
Series2
Series3
Series4
Series5
Series6
Series7
Series8
Series9
Series10
Series11
Series12
Series13
Series14
Series15
Series16
Series17
Series18
Series19
Series20
Series16
Series11
Series6
Series1



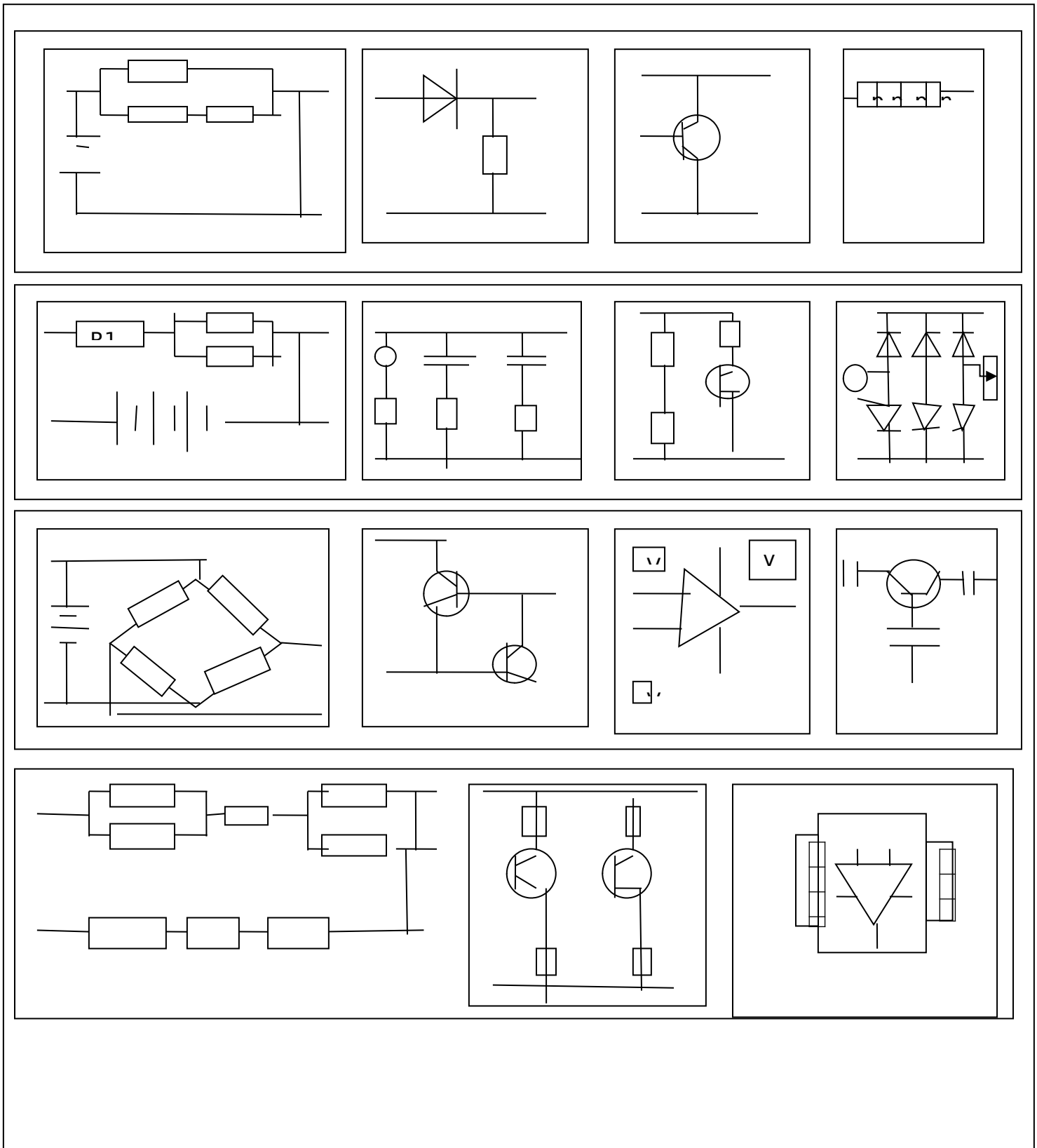


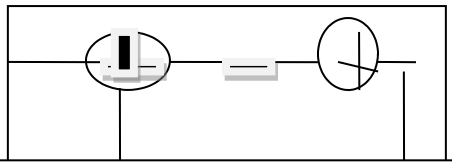


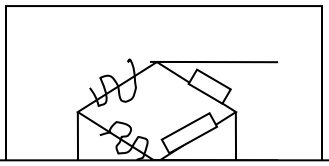


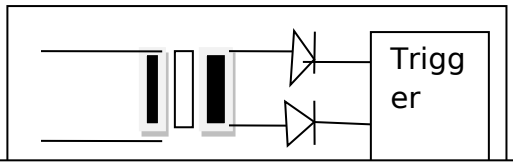
ENTRY CRITERIA TASK BOOKING MAGAZINE

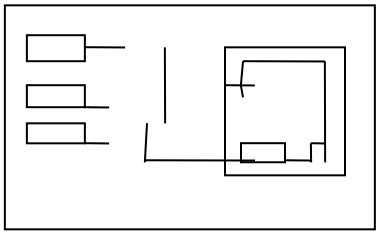
ID ORDER BOOKING	TOPIC BOOKING	COST BOOKING	TOPIC PROJECT COST COMPAGNY DESIGN
Discovery sciebono 16pg review **R**	Assessement Career	R	Scie bono discovery centre , scie bono science career cente my journey of self discovery
Discovery R guid	Assessment considerer	R	How to build your self a bridgth technical future Consider atechnical career let get down to to work how do I play play for my th fact how to built your self
R discovery book	TOPICS CARER Planning	R	-workplace readinees ,module 2 career development prticipale
R	Activity example tip toolkit	R	Topics: career planning , wath is career yourself - Exploring your option - Making informed career - Take action education skill civi
Birthday parties Id guid	Assessement	R2200 R2500	Planetarium paking Clumbing wall package secret lab
Merseta , inseta , Guide Chieta	Assessment	R	Manufacturing engineering and related service seta Determine level framework manufacture level subject open ,vocation ocuupation , skill program , registration learning , rpl programe registration difference Occupation tvet college list Skill employment unity existing emp[loyer
Minin qualificaion **Saqa , -civil engineering saice** **-science and technologie / nrf/saaata**		R	Guide joint the dynamic wanted of mining and mineralised Topic:s building concret road way municiplity Topic: nanotechnologie electronics nono science concil science , material semie conductor safety , transistor computer memo rom ram , Topics industrie , industrial , electrical building

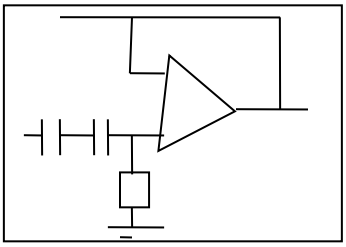


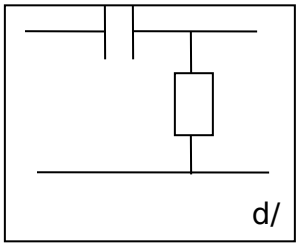


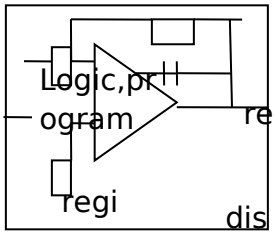


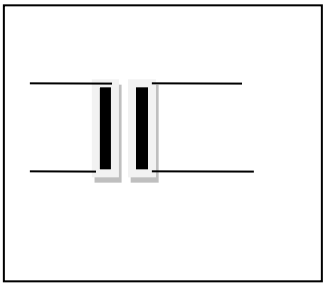


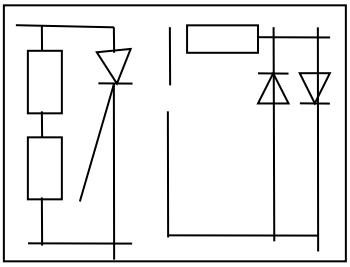


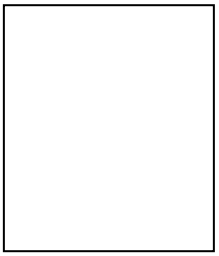


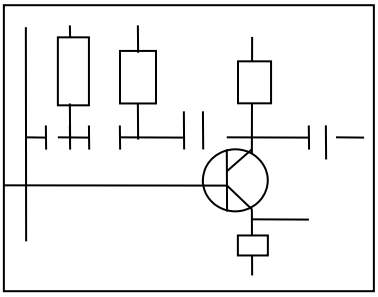


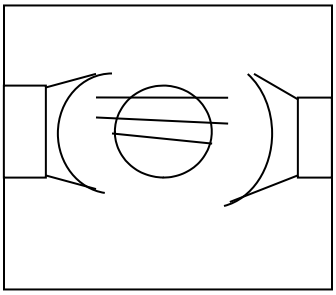


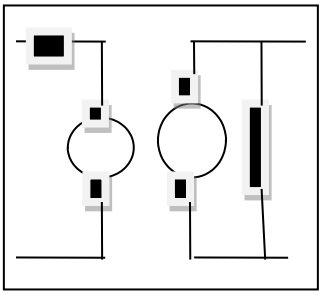


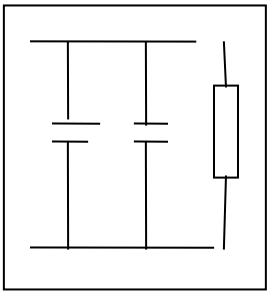


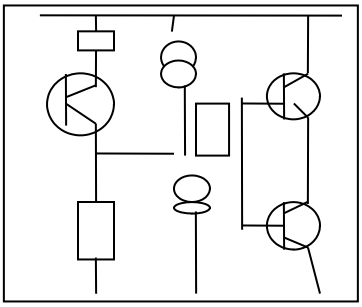


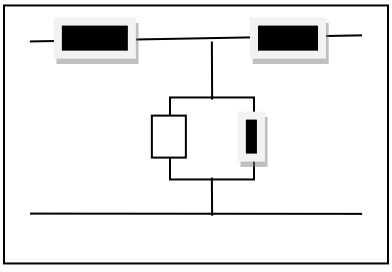


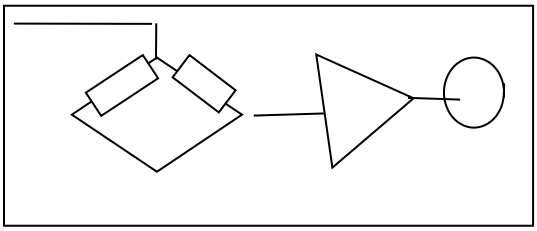












Scmitt,trigg
er

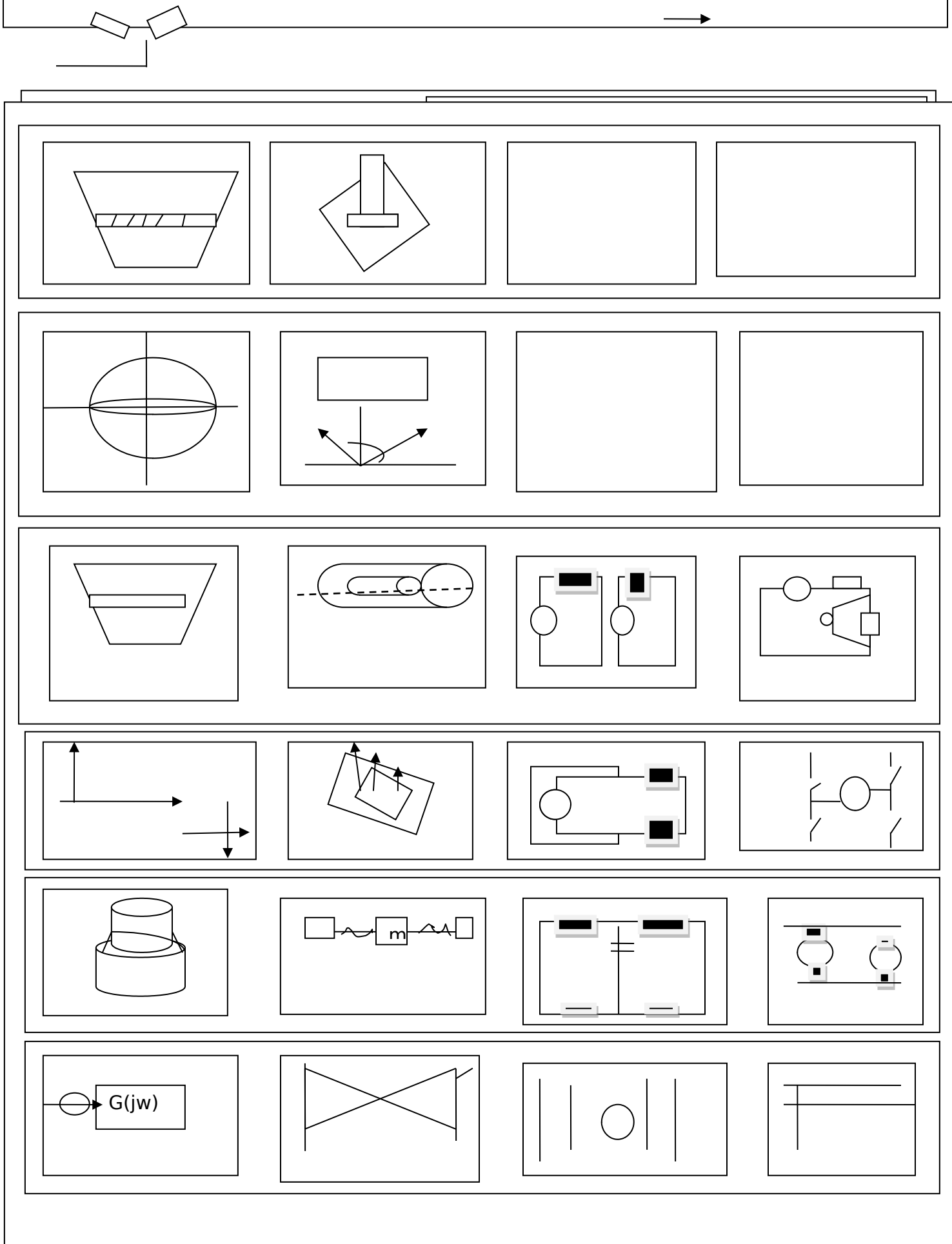
And gate

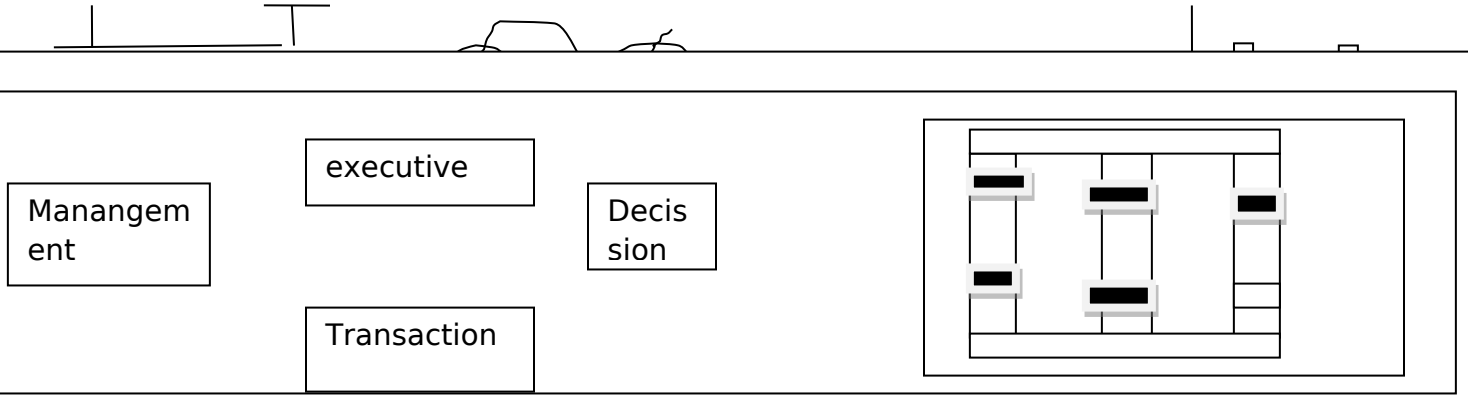
counter

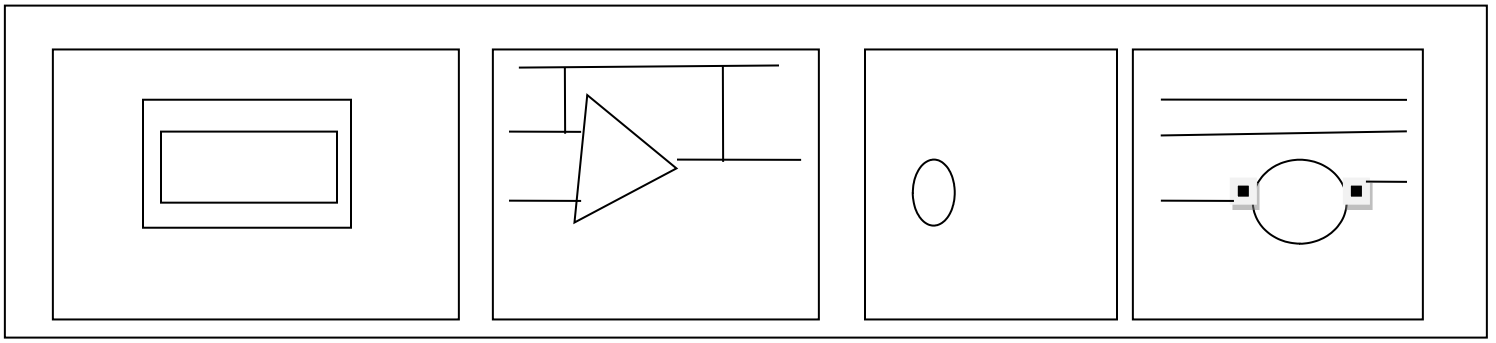
Red raw

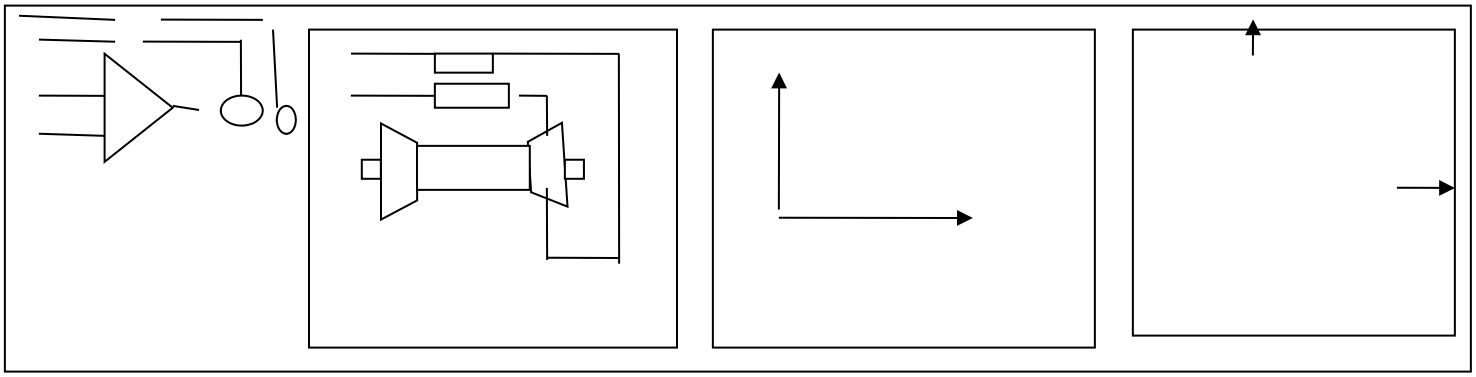
oscillator

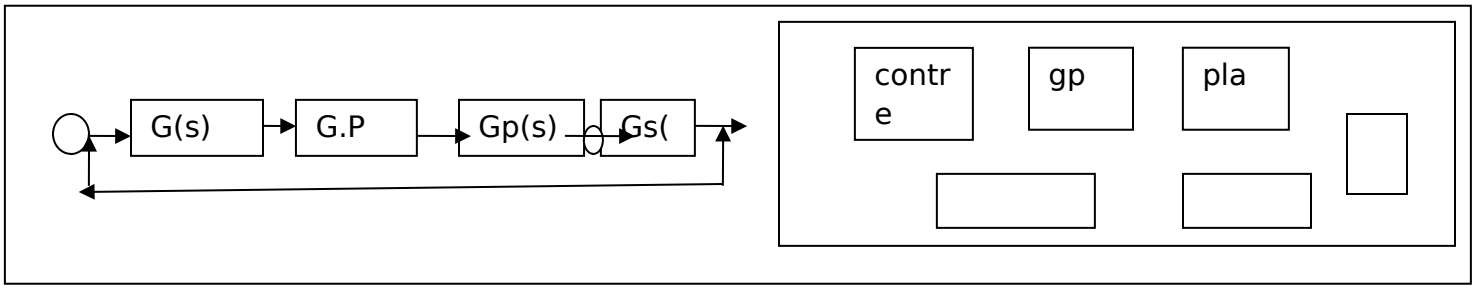
Time ock

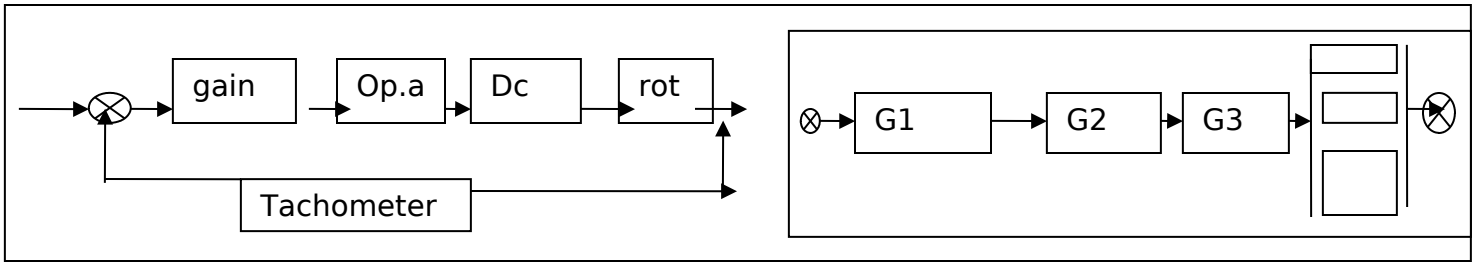

m
G(jw)

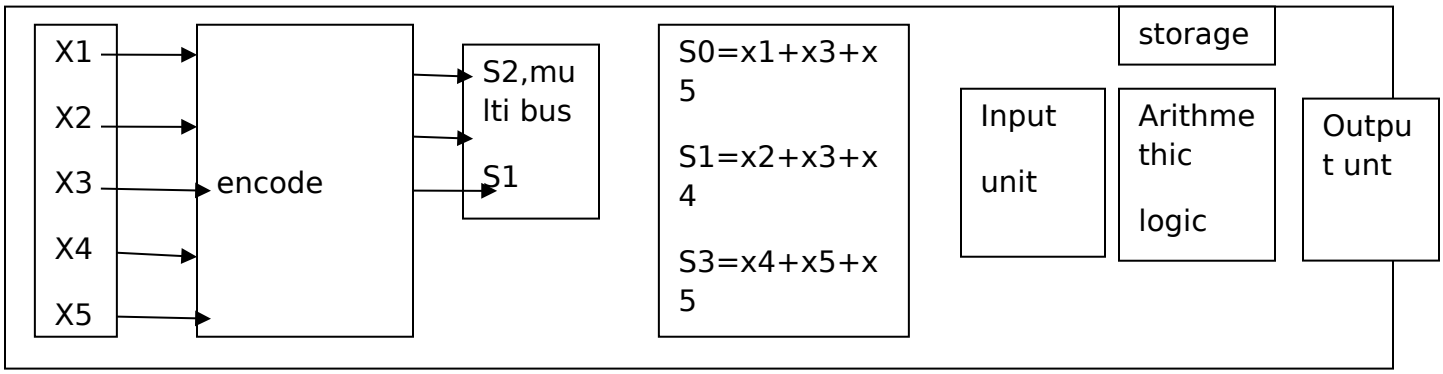

Manangem
ent
executive
Decis
sion
Transaction





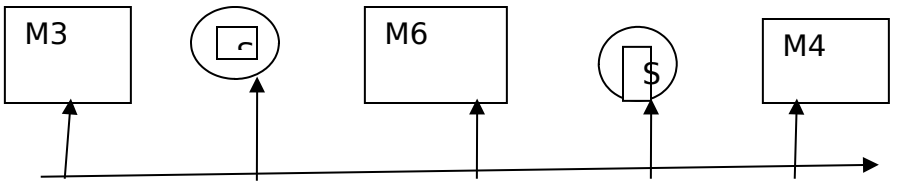

G(s)
G.P
Gp(s)
Gs(
contr
e
gp
pla


gain
Op.a
Dc
rot
Tachometer
G1
G2
G3



input						Output			register
X1	X2	X3	X4	X5	X6/ x7	S1	S2	S 0	Select data
0	0	0	0	0	0	0	0	0	non
1	1	1	1	1	1	1	1	1	
0	0	0	0	0	0	0	0	1	non
									Pc
									Dr
									Ac

hardward
Virtual file
interproces
virtual
dispatch

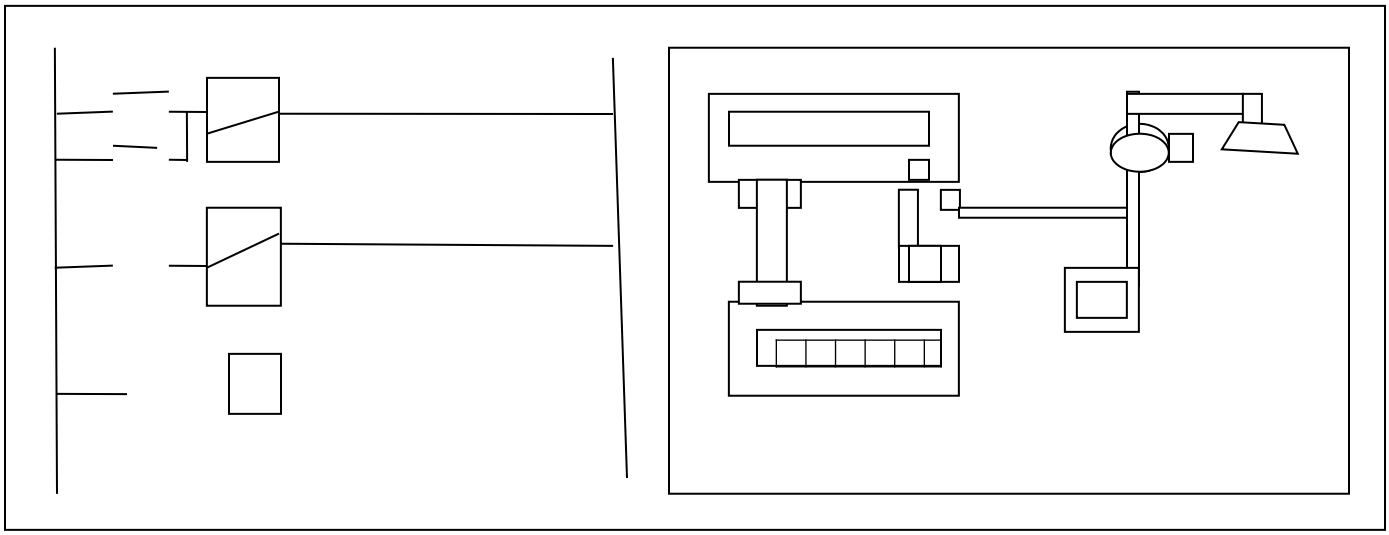


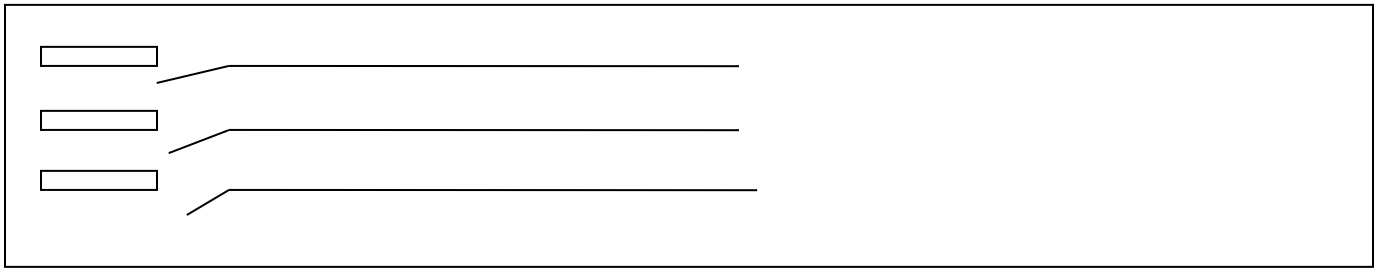
input

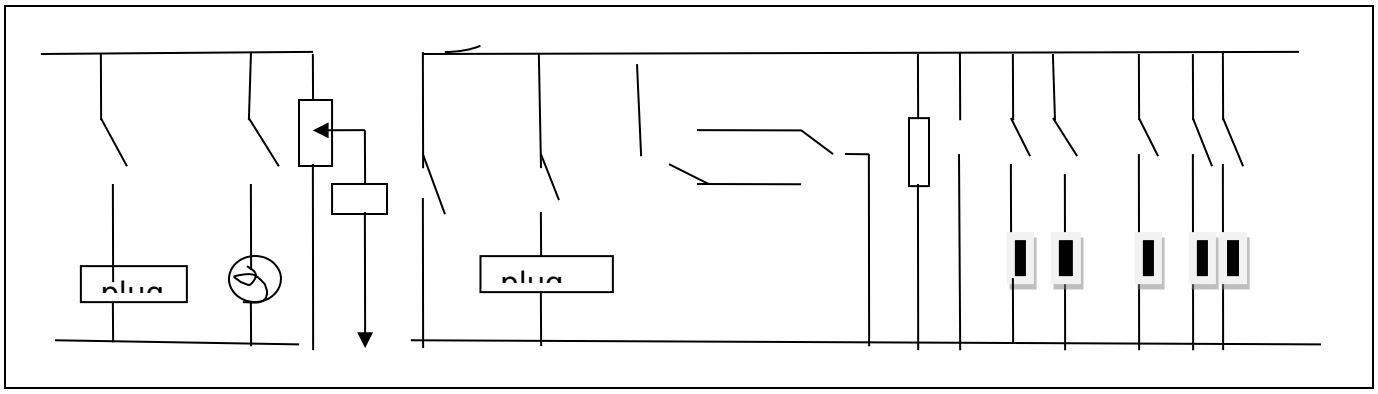
Contrl

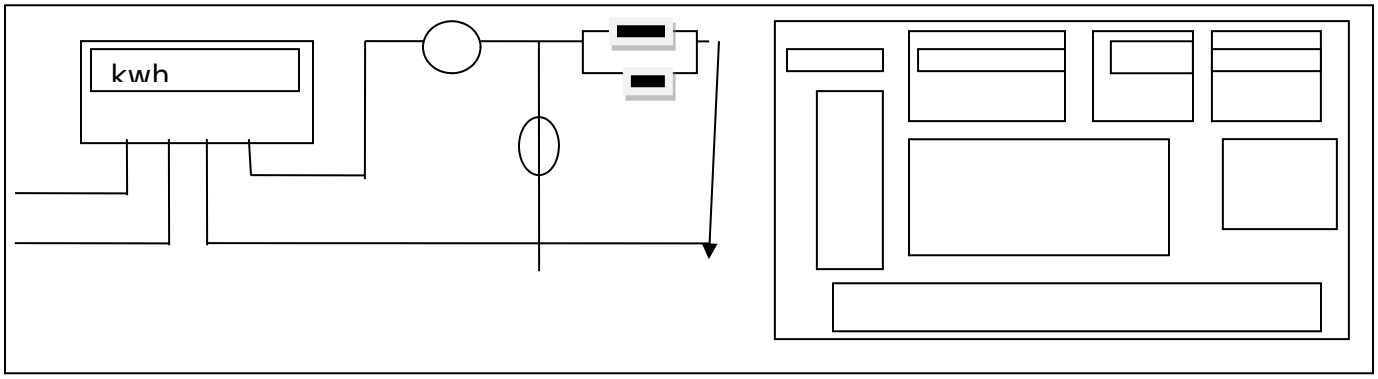
Process

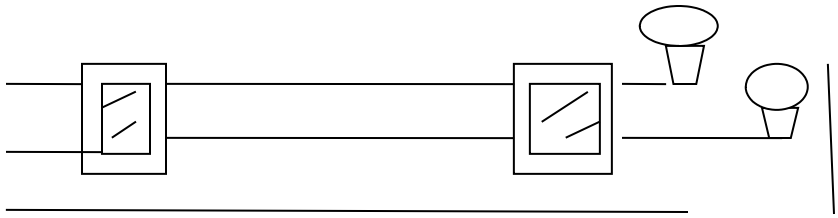
Cmbnat
ion

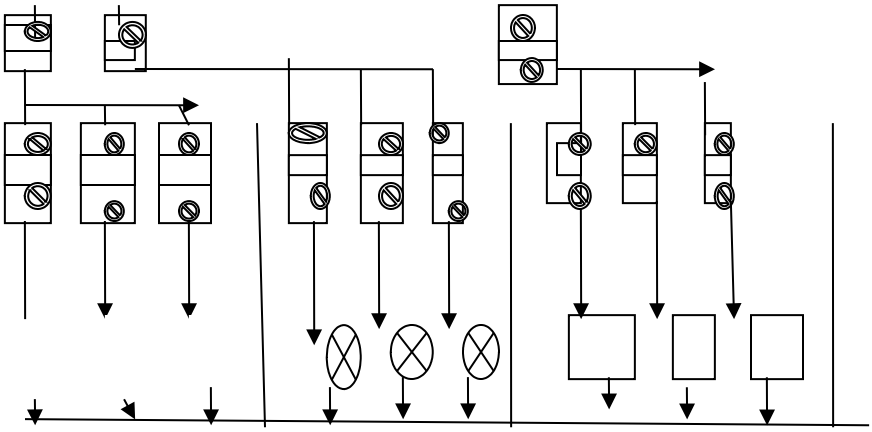


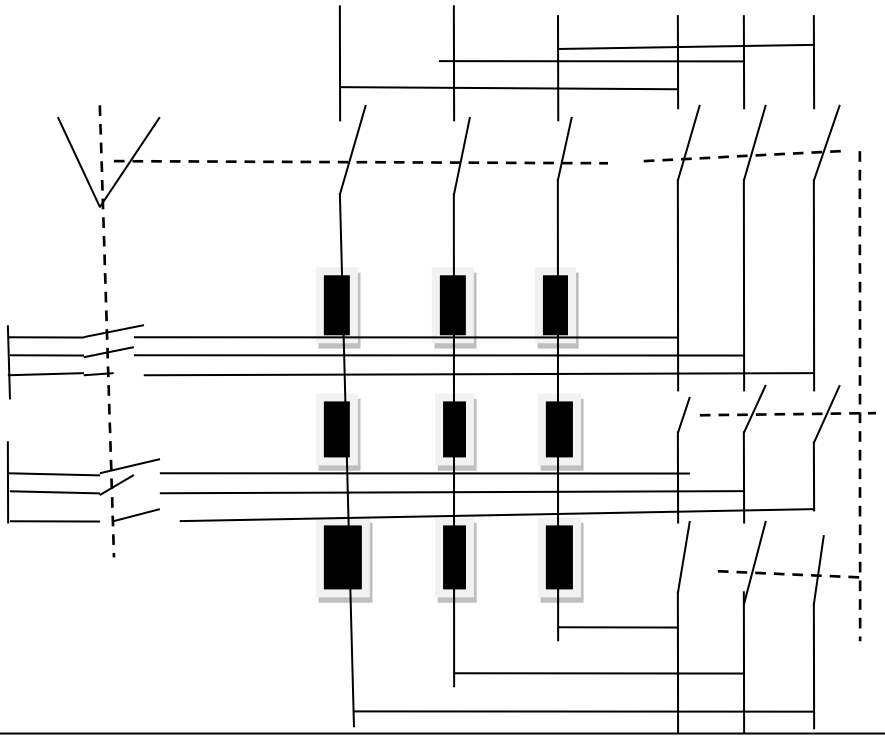


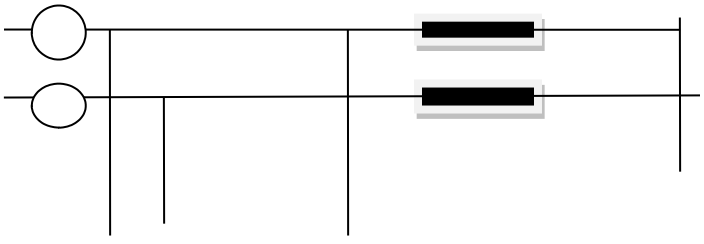

plug
plug


kwh

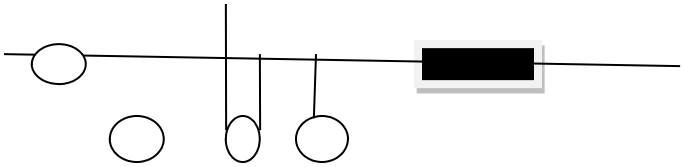


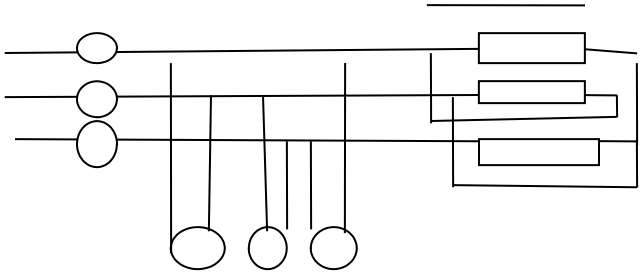


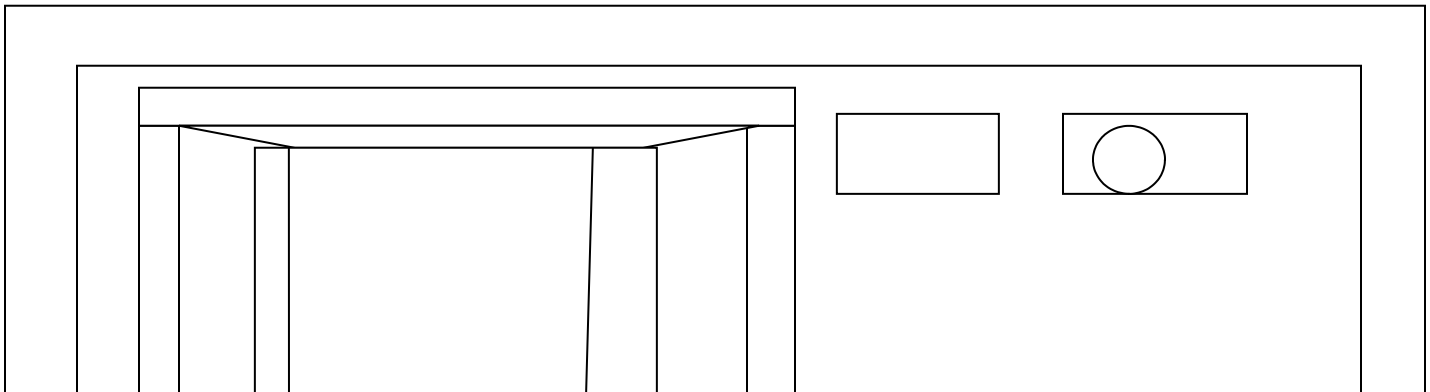


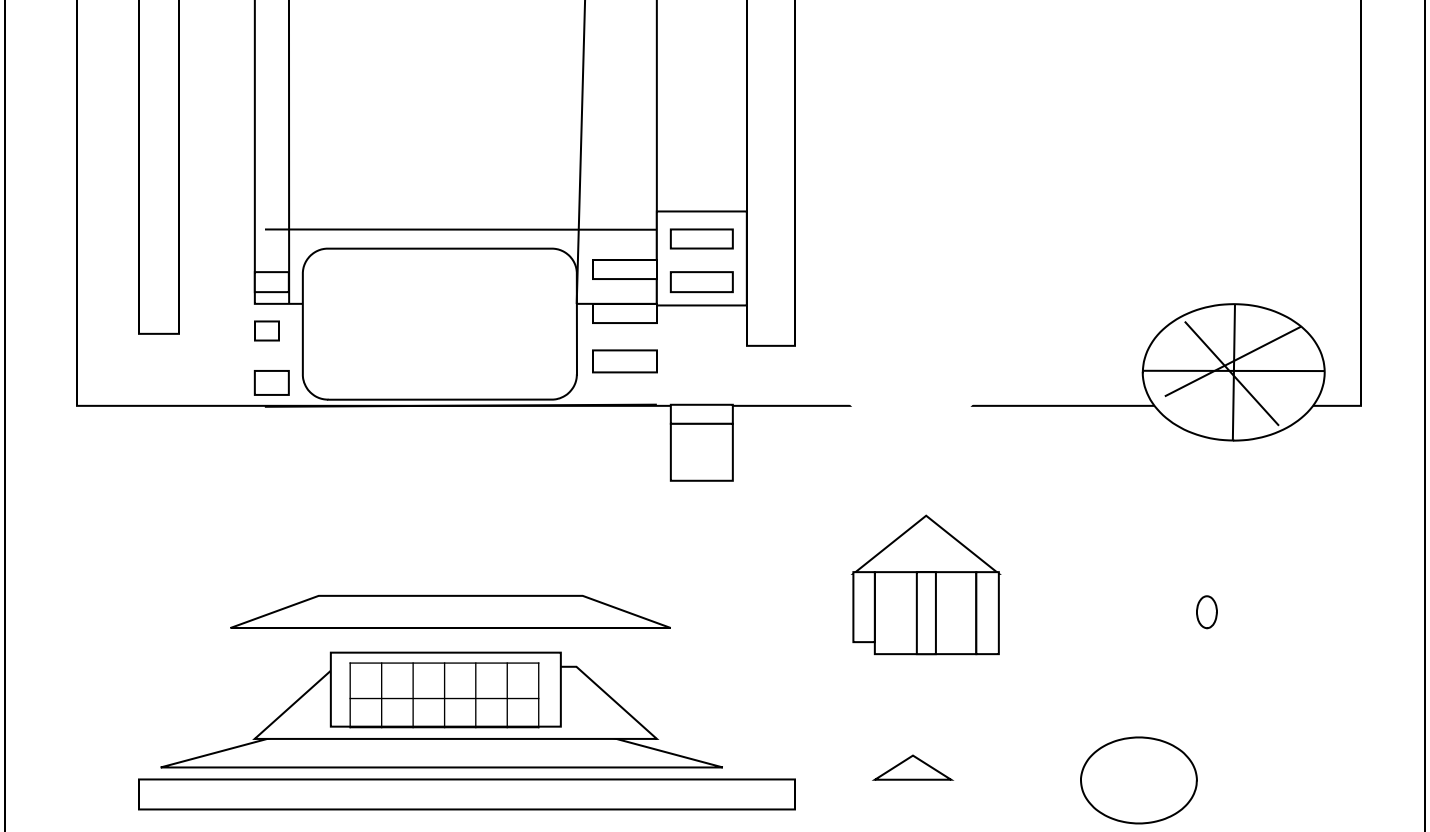


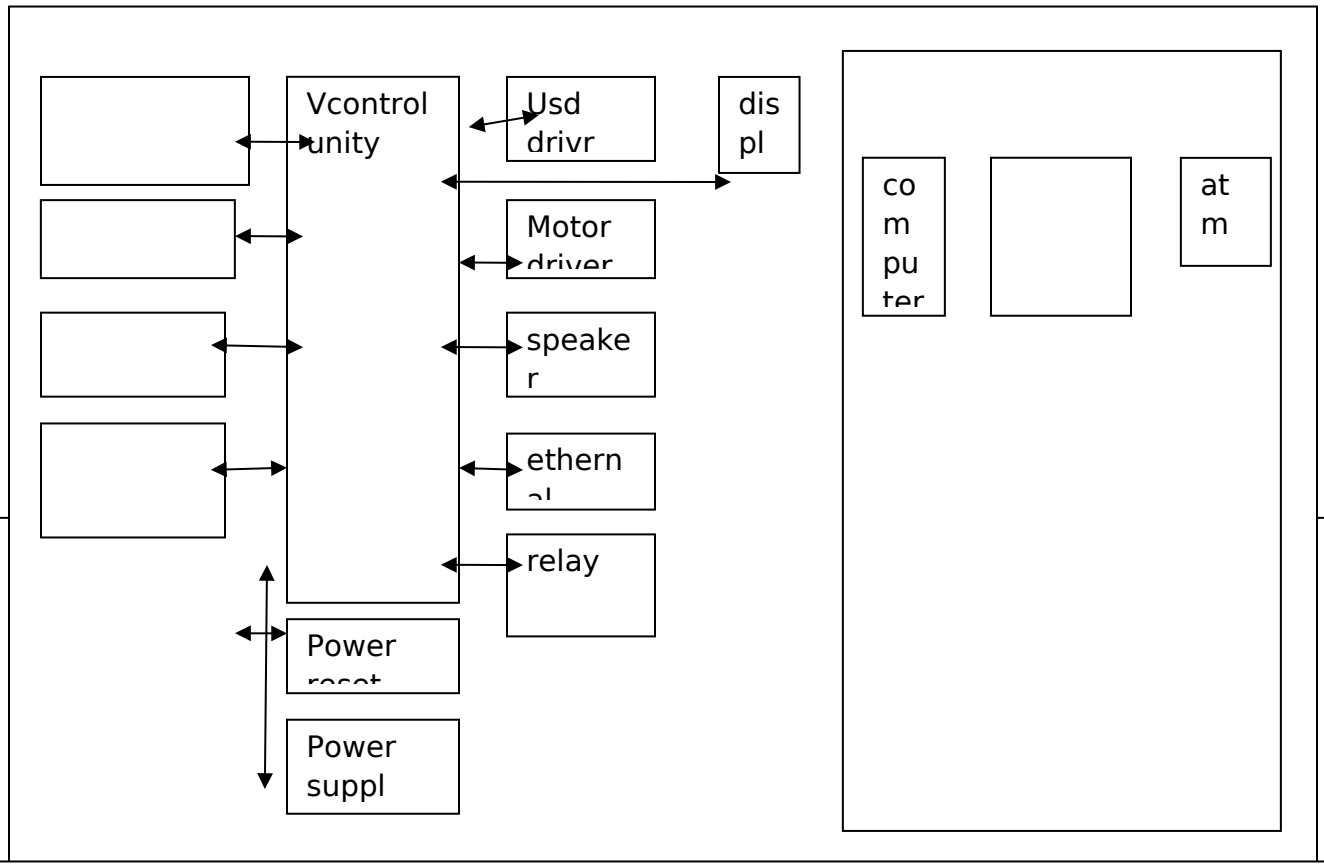
V1,v2,v3,, i1,i3,i3,,z1,z2,z3

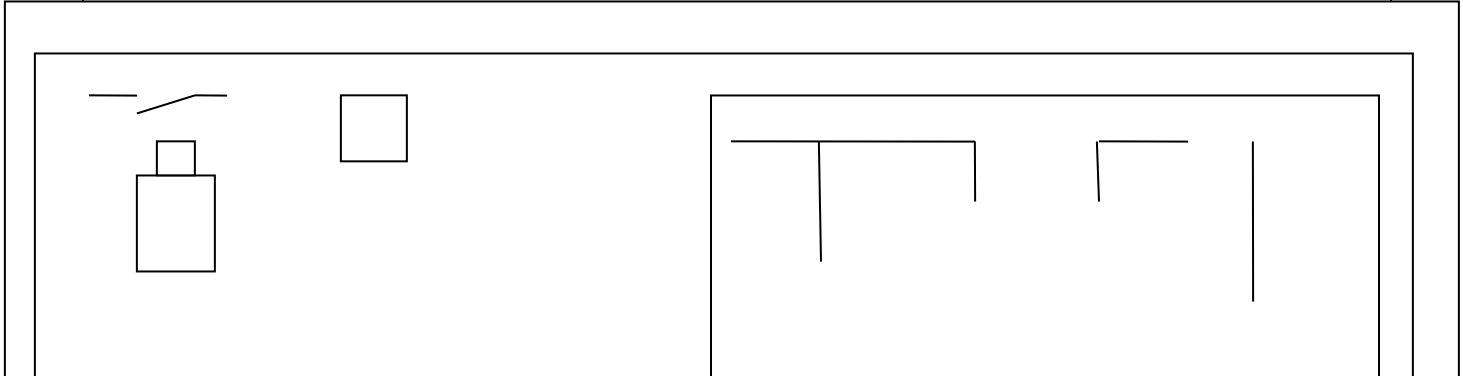


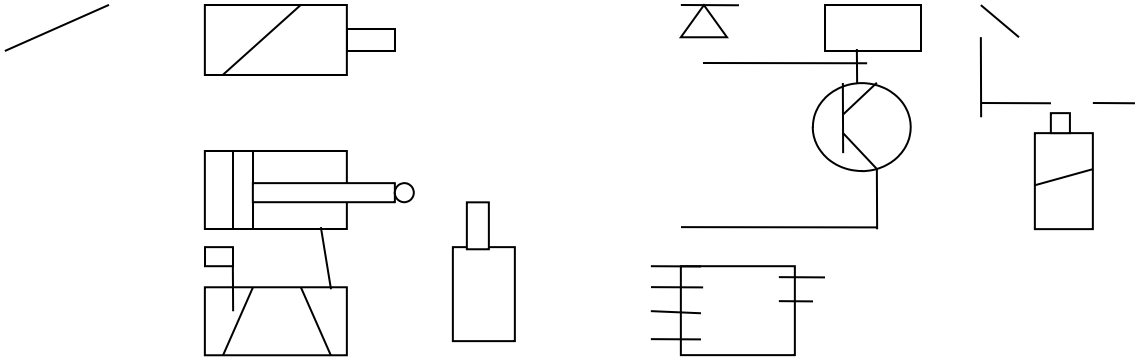


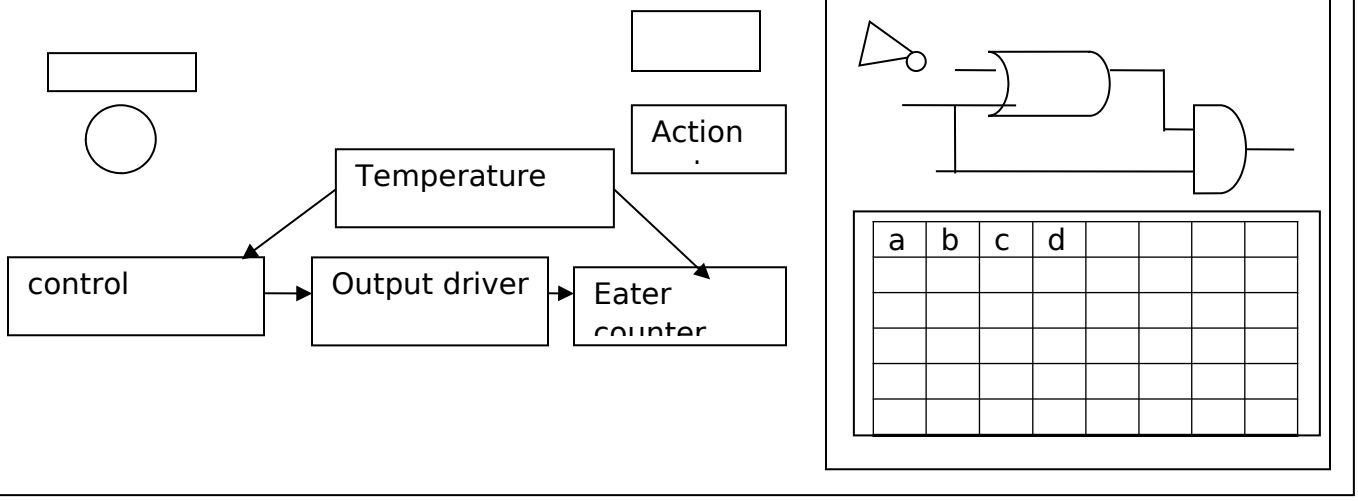


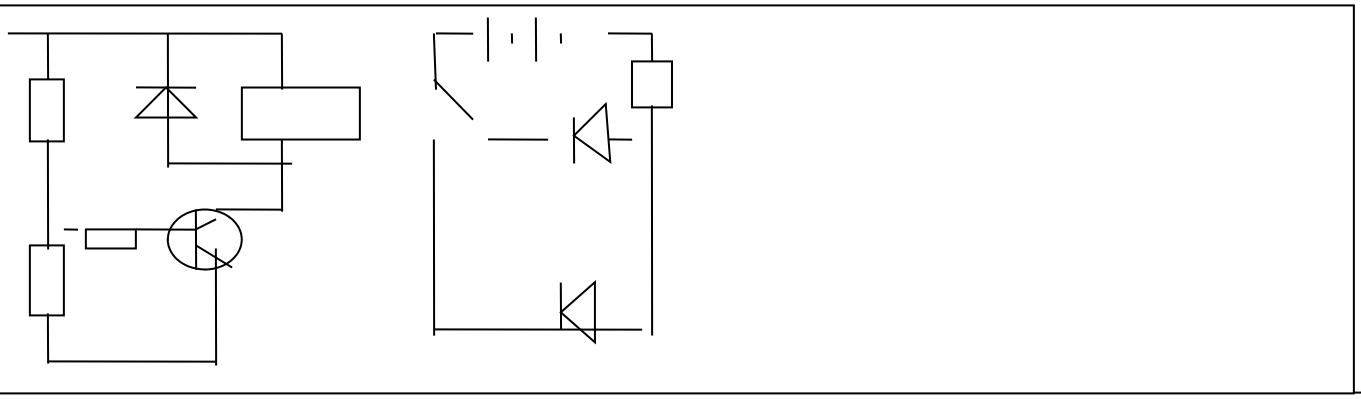


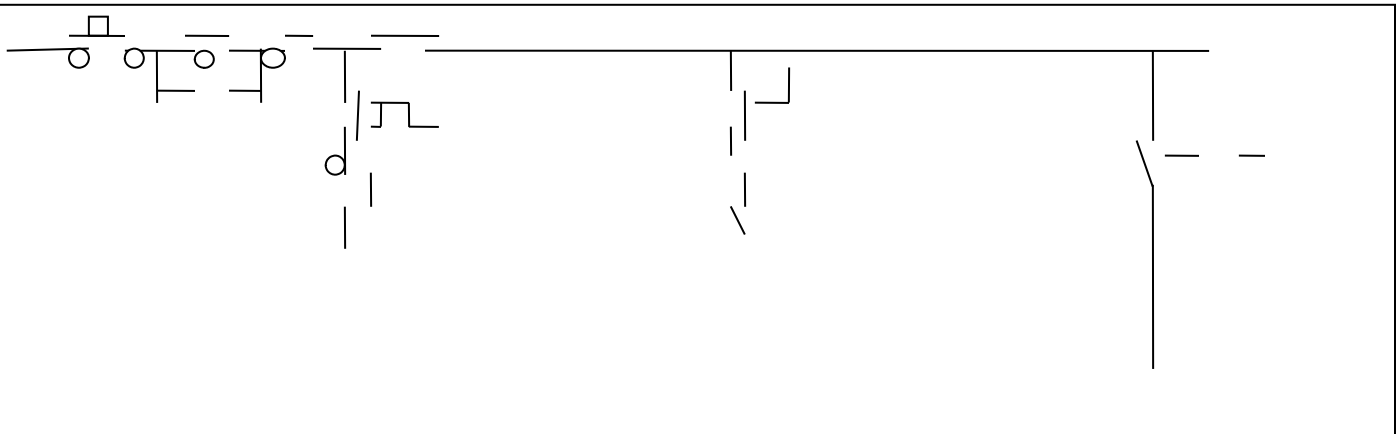

Vcontrol unity
Usd drivr
dis pl
Motor driver
speake r
ethern al
relay
Power reset
Power suppl
co m pu ter
at m

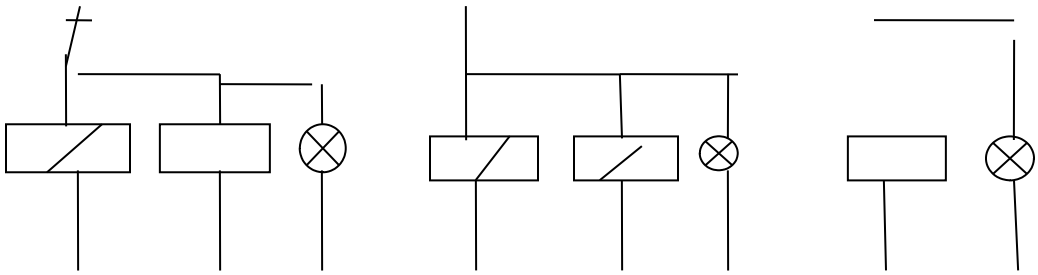


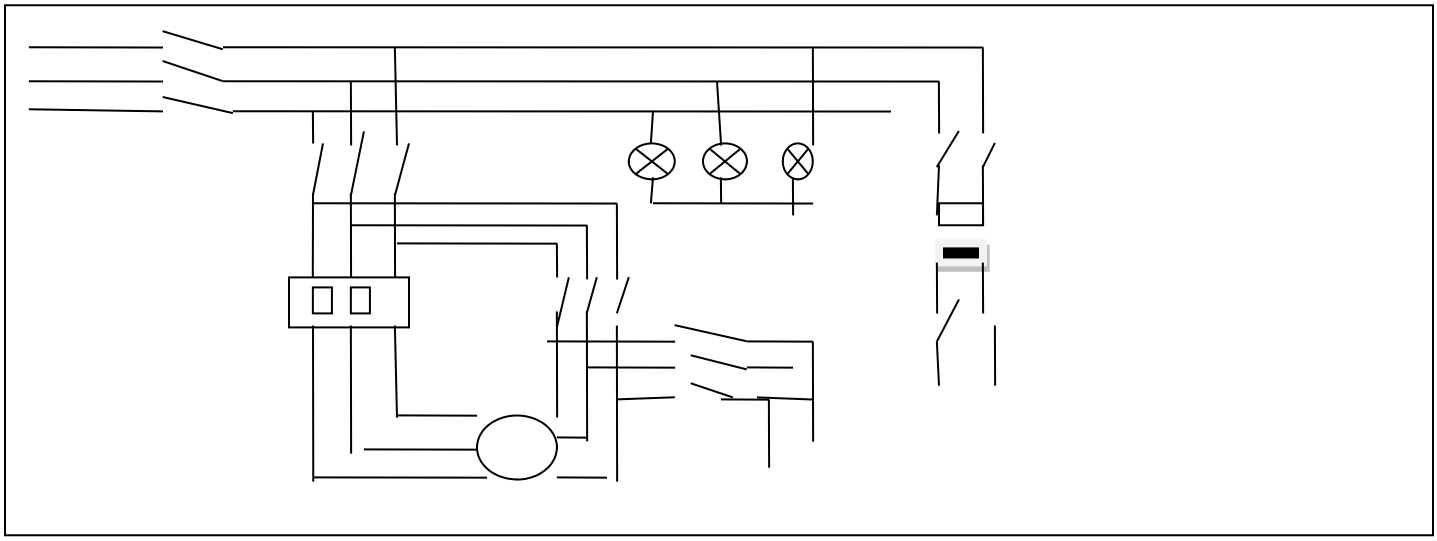


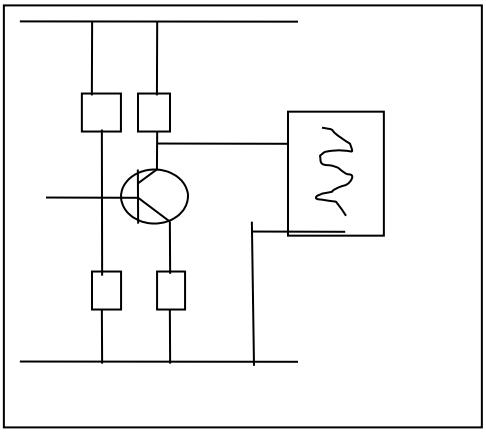

Action
Temperature
control
Output driver
Eater
a b c d

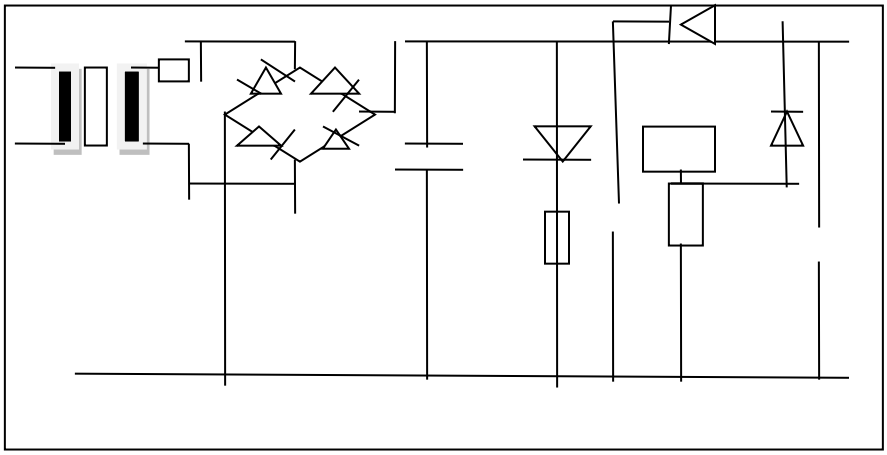








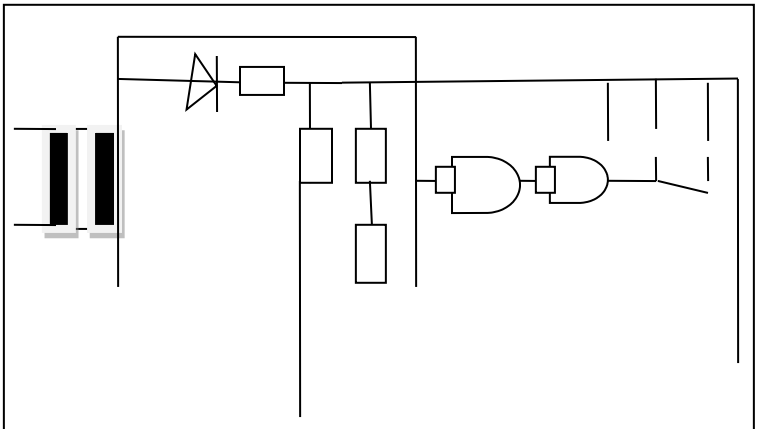


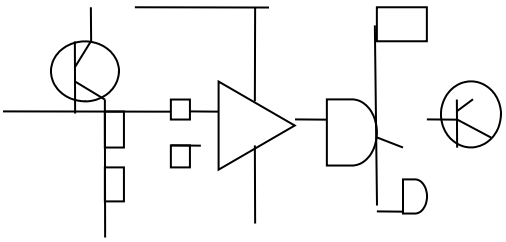


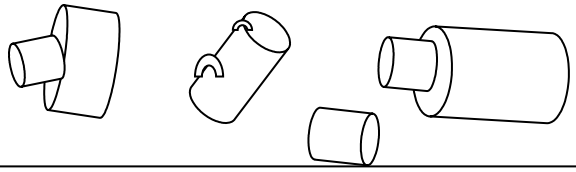
Input logic

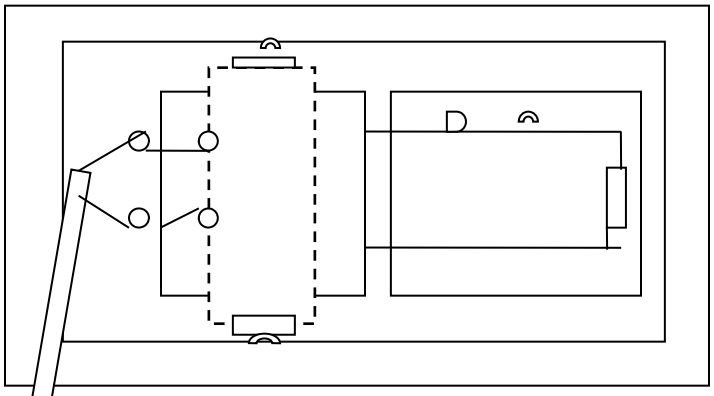
Output logic

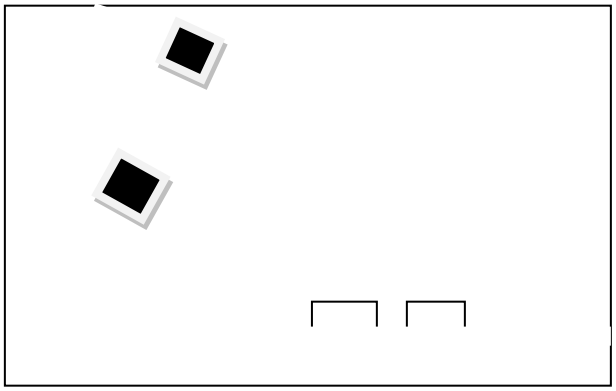
a	b	3	6 gat e	8 gat e	11 gat e	
0	0					
0	1					
1	0					
1	1					

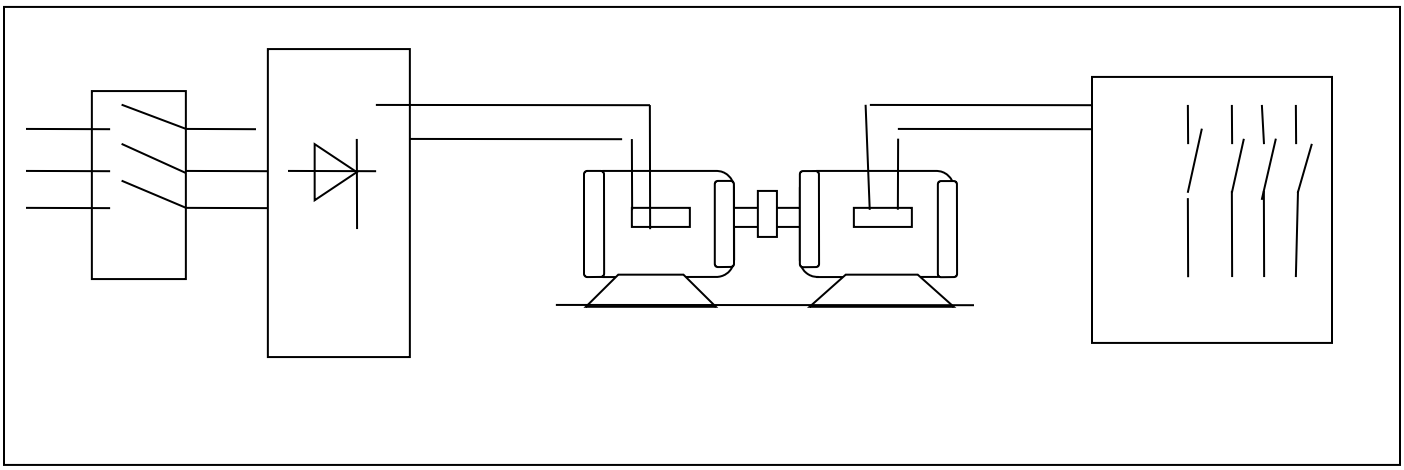


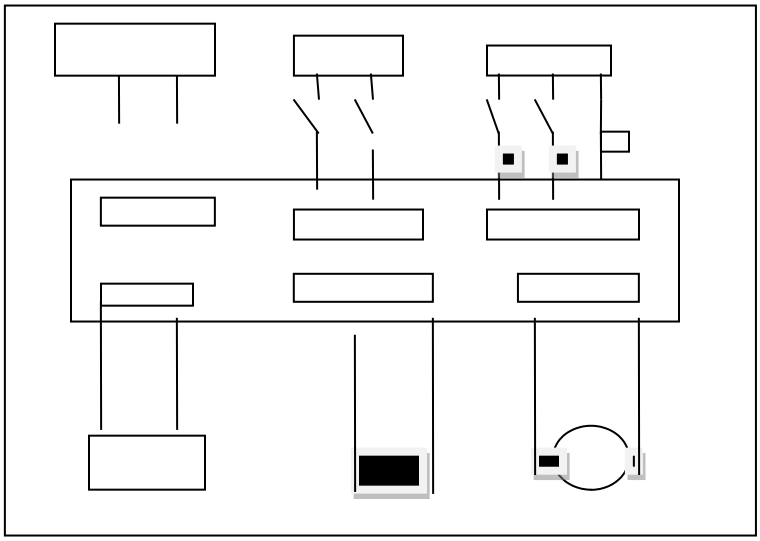


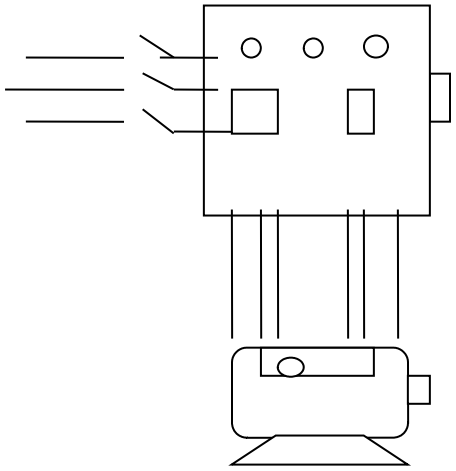


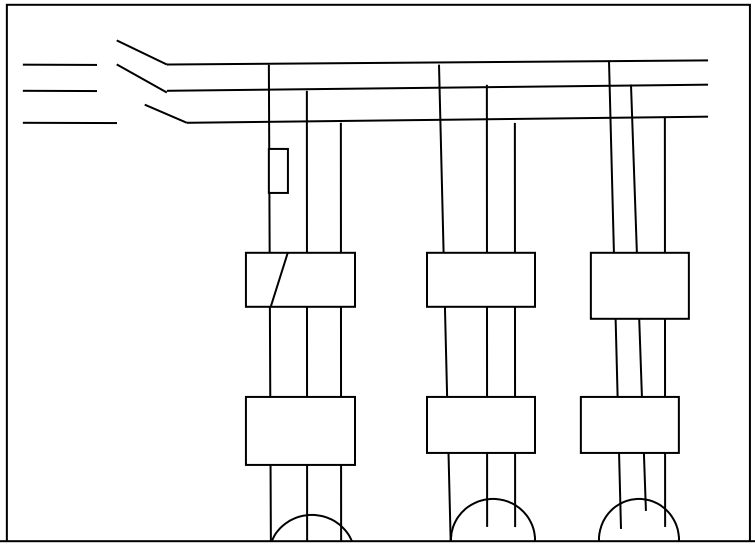


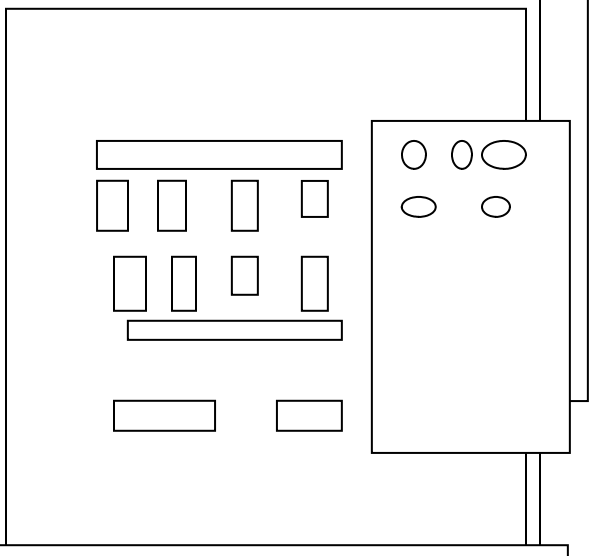




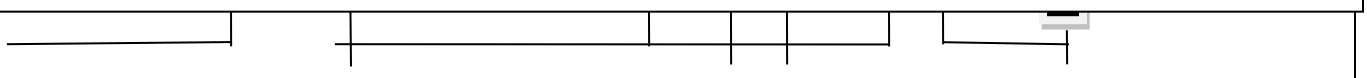


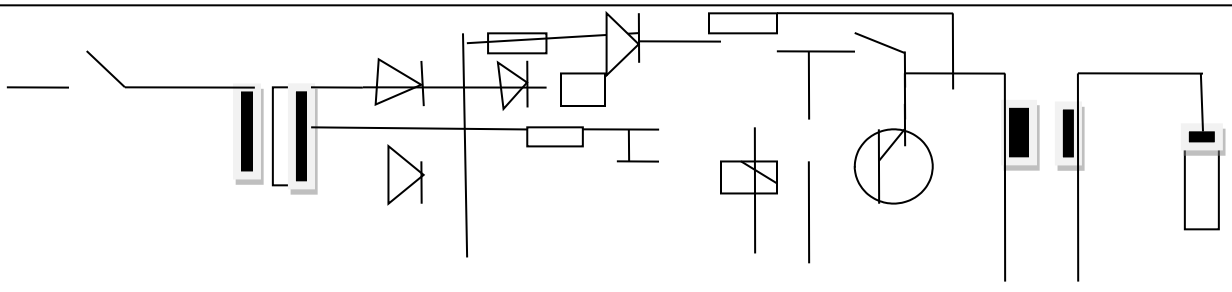


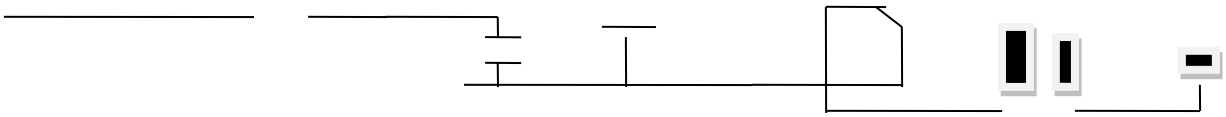


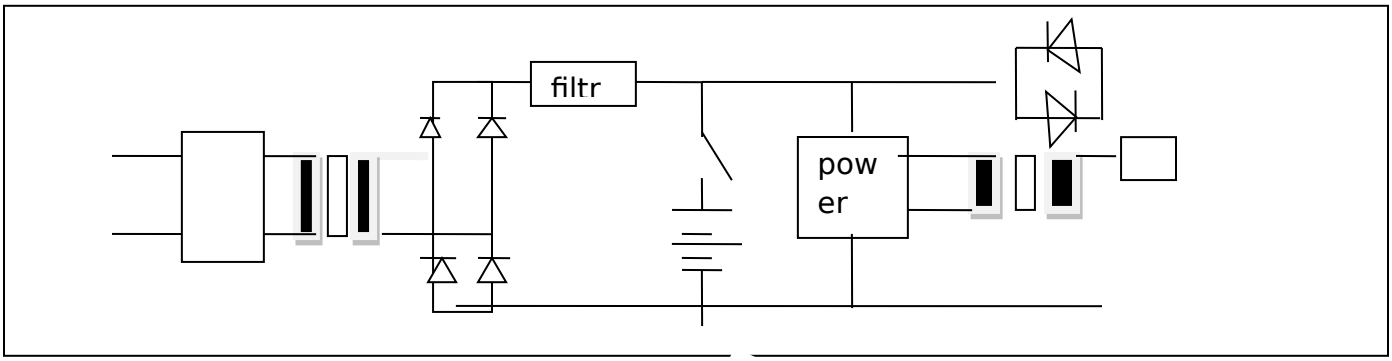


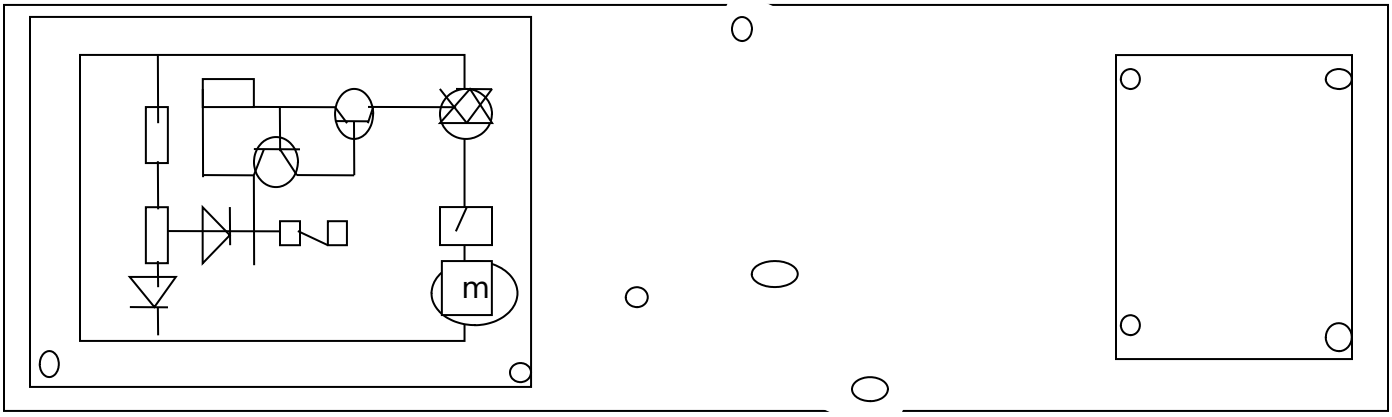
Requirement , tools instrument	Materials
Trane tools kit , scrket , ik	Push button , red , green , indicator holder , over load relay 0-15, 45, raceways , 1,5 sqm meter copper cabler , 650 , terminal connector , wire ferules , cube binder cabler shapes , nylon cable
Hacksaw frame with blade 300m ,hss drill bit 6 mm , 3 mm ,round nose plier 150m, crimping tools 200m ,	
- Instrument equipement , digital multimeter , megger 500v , contactor 4 ples , 16 a, 240 v, timer 1 numer relay	

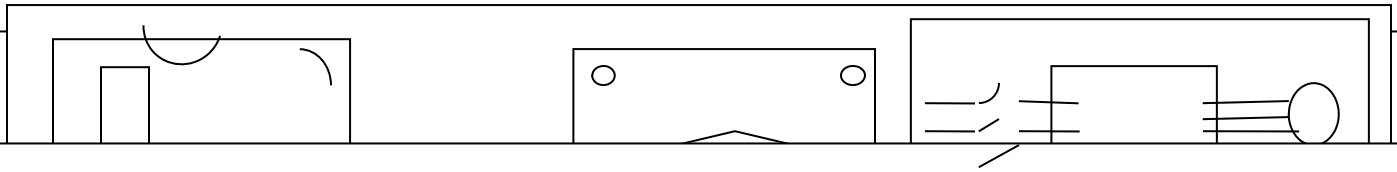


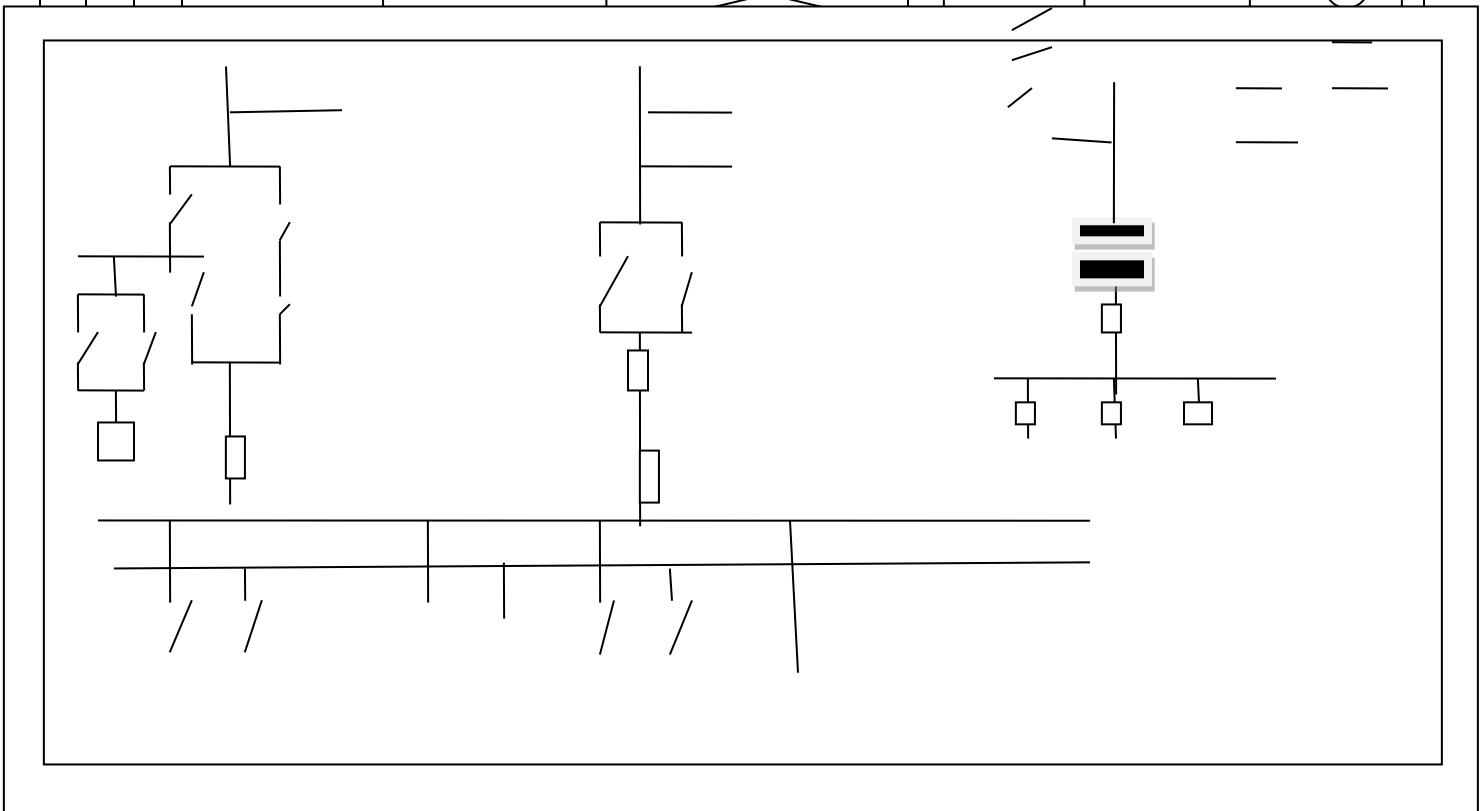


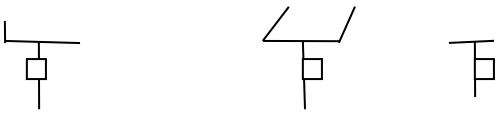


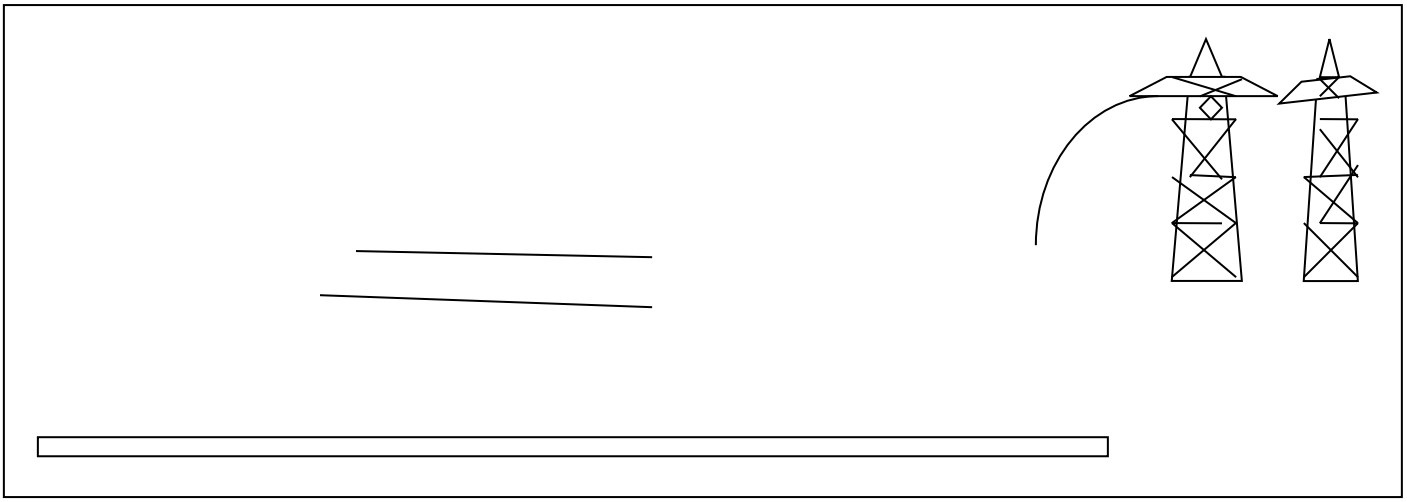

filtr
pow
er

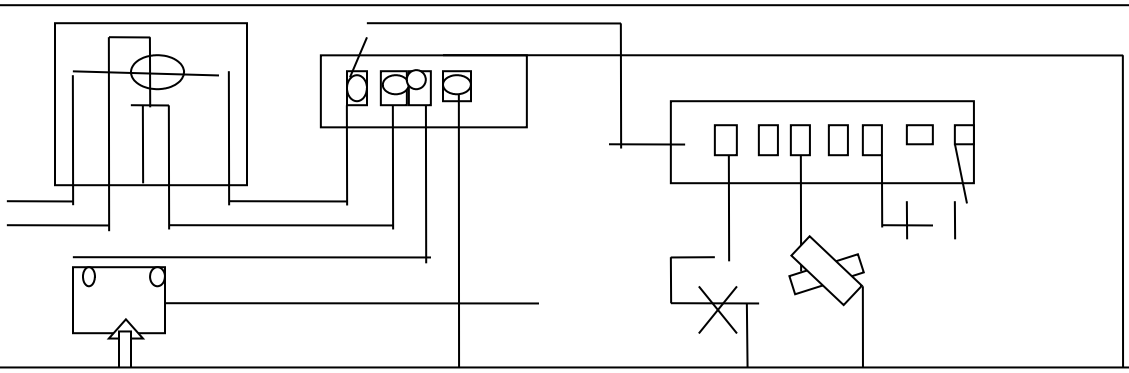

m

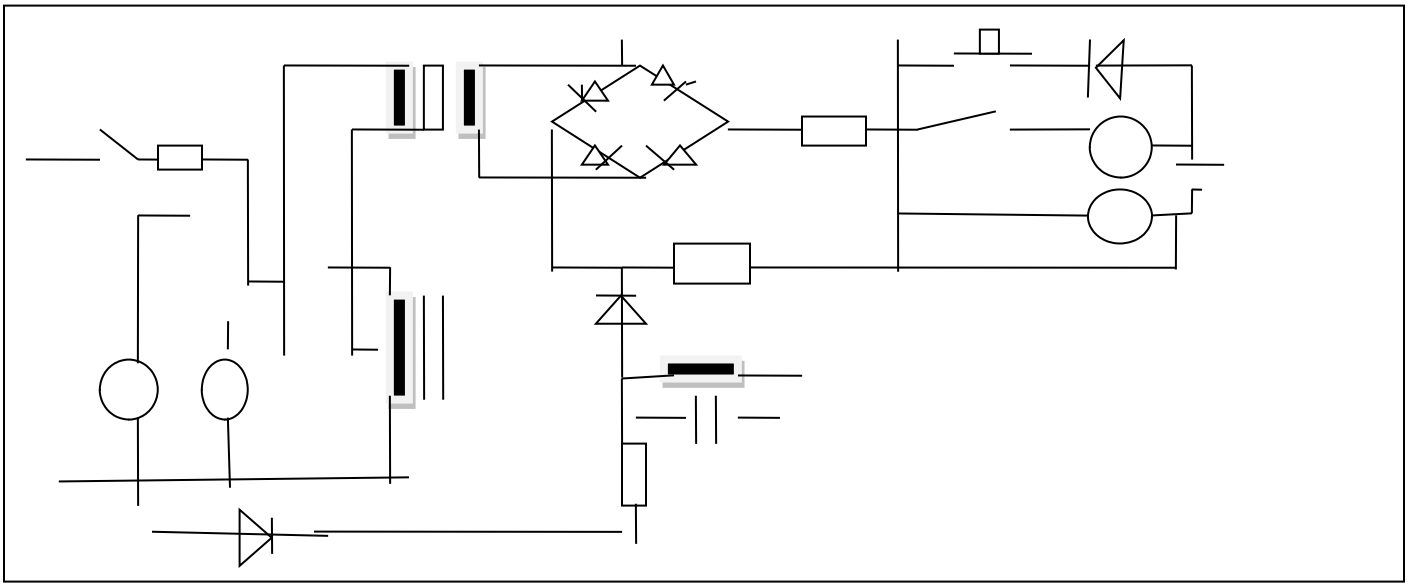


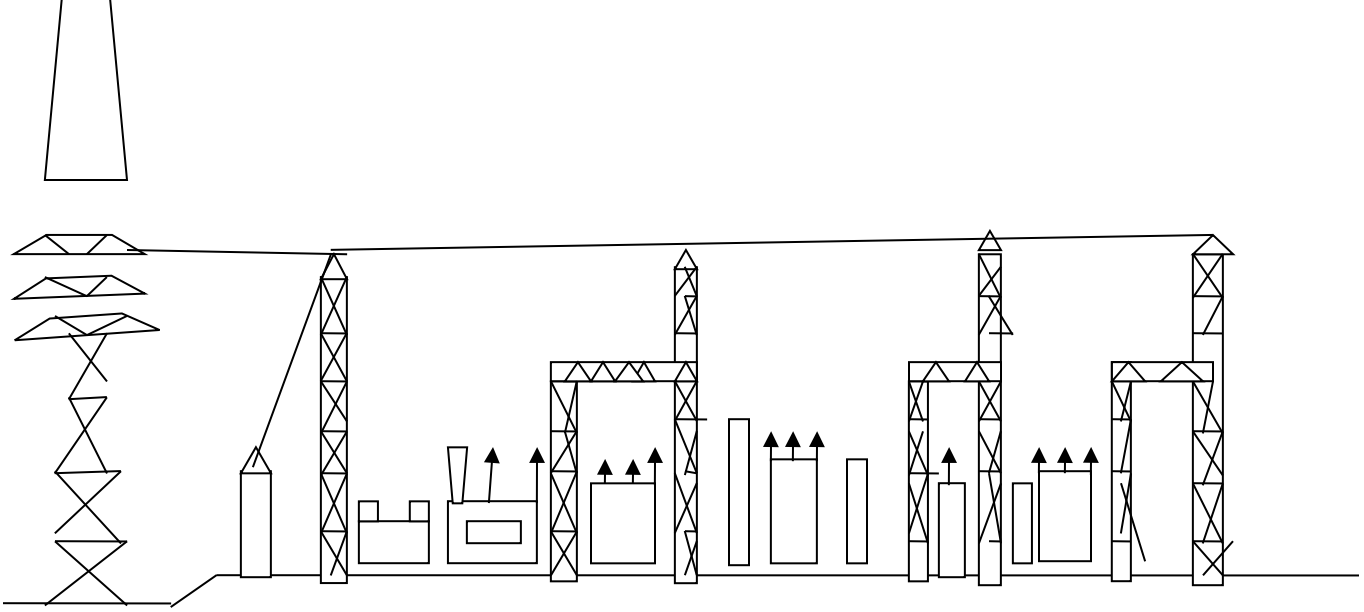












4, 3,,1. 5, 6 7, 5, 7,6,,8 9 ,8,

A, primary power line size, b . secondary power line size , 1 primary power line , ground wire, 3 overhead line, 7 current transformr , 8 ligthing arrested, 9 main transfo , potential,

S1	Name of the equipement	Specification function
	No of wind blade , geae generator , exciteor , turbine	
	Rectifie unit	
	Line convert unite	
	High voltage transfor ,	
	Internal supy ,	
	Wind turbine gride	

Isu

genera

ru

excite

Turbine controller

tshingombe fiston <tshingombefiston@gmail.com>

Re: New message from "SAQA"

foreigninstitutions <foreigninstitutions@saqa.co.za> Mon, Apr 29, 2024 at 8:04 AM

To: "tshingombefiston@gmail.com" <tshingombefiston@gmail.com>

Dear tshingombe

The purpose of this foreign institution’s enquiry service is to give some direction regarding accredited and non-accredited foreign institutions.

Please go to the following link: https://www.dhet.gov.za or access SAQA's searchable website database, the link is

https://reggs.saqa.org.za/search.php?cat=qual for information pertaining to the accreditation status of South African institutions and their qualifications.

Kind regards
Authentication Services
SAQA

The National Qualifications Framework (NQF) Act 67 of 2008 mandates SAQA to provide a foreign qualifications evaluation and advisory service, which it does in accordance with the Policy and Criteria for Evaluating Foreign Qualifications within the South African NQF, as amended (March 2017). Section 29(a) of the Policy and Criteria stipulates the requirements that a foreign awarding institution must meet for its qualifications to be recognised.

From: SAQA <email@saqa.piidigital.co.za>
Sent: Wednesday, April 17, 2024 12:11 PM
To: foreigninstitutions <foreigninstitutions@saqa.co.za>
Subject: New message from "SAQA"

Full Name:: tshingombe
Email Address:: tshingombefiston@gmail.com
Country Enquiring From:: Congo {Democratic Rep}
Purpose of Enquiry:: Check status for further study purposes
Institution Details:: st peace college afric institut police
Attach Document(s):
https://www.saqa.org.za/wp-content/uploads/elementor/forms/661fa039d9235.docx
Website Address:: www.tshingombe.com
Institution Physical Address:: markadet street president
Comments:: Gmail tshingombe fiston
RE: appeal application qualification occupation n diplomat award dr congo leaver 2016 submission and transcript certificate record supplementary .;.rsa completed n diplomat studie engineering n4.,n3;n5 n6.. ; quality insurence body irregularities in pr...
verificationsletter Tue, Apr 16, 2024 at 3:20 PM
To: tshingombe fiston
Good day

Thank you for your email.

Kindly contact Client Services: Contact Centre Support for assistance.

Foreign Qualifications Evaluation and Advisory Services

South African Qualifications Authority

Tel: 012 431 5000 - Fax: 012 431 5146

Email: dfqeas@saqa.co.za

From: tshingombe fiston
Sent: Tuesday, April 2, 2024 7:46 AM

To: Transcript Requests ; Thaga.d@qcto.org.za ; mabunda.l.l@qcto.org.za ; Central Office ; SAQAInfo ; QCTO Verification ; SAQA Verifications ; verificationsletter ; SAQA Verifications
Subject: Re: appeal application qualification occupation n diplomat award dr congo leaver 2016 submission and transcript certificate record supplementary .;.rsa completed n diplomat studie engineering n4.,n3;n5 n6.. ; quality insurence body irregularities in pr...

Project commencement .completion step.step
-you appoint eskom approved service contractor supplier typically register soutg africs council.
Step you submit the finak project design .in linevwith contract requirements to eskom step you start build .step eskom conduct quality assessment.
-explanation : customer care cs online ..home help how to contact .registration need ..
-account numbet :eskom account .password ..
Pre -paid meter numbet .pre paid number .
- 2 tarrifs and charged .eskom critical peak pricing tariff pilot phase .pricing document tarrif princinp related information generator .retail tariff plan .reseller contact links 2023 /2024increase nationaj energy regulator has determined followed tarrif increase to alplier to eskom direct customer tarrif charge ..
-customer category local authority tariff charge affordabilty homeligth 20A..
-affordability charge ..eskon submitted proposed change to its tarrif to be updated cost of supply study and strucfural charge excepted introduction:
□□□■□□□■□□□□□□□□

Integrity: comprehensive approach to energy management business .advisory service provide information financiak assitance goverment grant incentive tax rebate operationel growth .trimmining shify save capacity

==========

- my application..position contactràct .managèment me ..engineering assist..

On Mon, 01 Apr 2024, 21:01 tshingombe fiston, wrote:

Explain:G rèport suppĺy stàtut apply to connected your generation to electriçity newtork new energy technologie solutiòn in rsa provide role in the electricity value installàtion buildiñg own electricity connèction eskom offers.
A self build connectìon projeçt enable natìonal ǵrid .switch on a pòwer new self pròject aŕe design ..
-a customer saqa undertaking one self project are designed.undertaking multiple customers undertaking .
-flow checklist to ensure .small scale embede generation .scale connection.your to grid integrited electricity system anew energy consumer generating and distributing own energy installation .
-explain generator licensing registration generator neteork .eskom initial configuration

cater off grid connection assist .embed embedded generation tarrif charge we have a selected charge that scale embed installation .
Explain .application process trained small sure your generator .
-nersa size licensing and is utilised as back up source electricity during power interruption that is not grid no point of connector to irrespective is of size ..more100 kw ..but not point of connector irre.generator has a maximums capacity of .100 kw but 100mw..has ppint connection you are export grid maximum period of 36 month size mentioned was exempl.licensing prior generator network configuration..
Selection generator network config your product regulation ...

-An off the grid system off the grid stand alone system does not have a point of connection that tje generator to the eskom electricitu distribution newtwork generator is there for completed..
- explain .phase encompassess primary plant connection work establish scada testing and commisioning plant ensuring compliance code standar relate ipps.
-the project execution phase is executed according to the milestone schedules timelines construction completed.project is ready to grid connect.grid connected date gcd .commissioning and energetizing to achieve grid connection as stipulated in the milestone schedule time line.
-test and synchronize .test is undertaking to ensure compliance and commisioning toword commercial operation .
-commercial operation date cod project commer3 connected and ready for operation the ppa commercially..
-operations phase . The role of gay post grid connection is to ensure that all activities necessary for the safe reliable and optimal operation of the ipp plant and eskom network are communicated and carred out in manner that ensure long term sustainable .value creation for both partie.
-explain role of GAU is to ensure that forecasting date schedule unscheduled outage maintenance plans switch and isolating procedure and angoing compliance report are communicated between eskom ..
-explain conductor type allowance electrical
..a transformer static piecr .
-explain IPP : connection process consultation and application phasr the grid connection process adress the need for consultation .with IPP developers consultant to advice on potential.
Explain.It adress the process requirements clarification as welk any briefing notebstandard.
Explain .estimated project cost and the associated agreement ipp.submit aplication .the ipp develope completed or revise an application with requirements provision completed assurance of the rigth to de develop propose .developed submit on application .
-review application and request additionak info.
- quotationn contacting phase issue .ipp cost evaluate accept decline desigb concept prelimine desigb.eskom arrages scope cleare..
- raise and pay commitmeny paybself building projects .business customer subject optionej allon ttiming of connection cost .
- explain apply the contractor appoint accredit ensure that correct equipment quality work adher to eskom stand no work allowed on upstream asset substation .
-step document eskom responsability in regard saqa undertakinh self building electricity connection.responsabilty selected site rout of project .obtaining land rigth inclusive of statutory .doing environmental impact study and obtaininf doing final designand risk assessments..project construction and control plant contractor managing all appointed stakeholder constructionelectriciting .
- explain eskom responsability.
Accepting the site route selection project ..standars and specification relating to site

doing work existing final project .
-doing quality ckntrol and monktoring construct work .doing site inspecetor .
Step .htpp eskom equipment specification design and drawing eskom electrification standard ..eskom guid .
-step 3 describ describes and motivate your project get a specialiste .
-Name project :tshingombe tshitadi
-background :expo science
-reason bhilding .visiting career student experimental working shopping.
Electricity geographix mva.
ramp up schedule .....
-voltage requirements type of conductor used substation transformer and their size estimated project .conceptual level summary of the component of the electricity connection construction preferred.
-step4.prepare ..
E1-E2=V1+R1.I1+V2+R2.I2+R3.I3
E2-E3=V1+R1.I1+V2+R2.I2+R3.I3

Network planning report or business casec report motivation .completed basic or preliminary design .infrasture in line with eskom standard design project risk assessments report.
-step gather the follow drawing copy id compagnybtax clearence .adress relever .applier large projectv quotation .appliervlarge project cost estimated supplier agreement quotation reflected project self build builds.
Step eskom authories the project ..initial the work eskom supplie appòint submitted final project include contracted re

On Mon, 01 Apr 2024, 19:36 tshingombe fiston, wrote:

Purpose : new building load shedding instage du to high demañd or urgent maintenance being performed at certain power station directed municipality energies your monthly electricity bills good environment loadshedding ligth maintain .
Energy saving tips for kitch appliances .use geyser smartly enerǵy tips fòr ligthing enrgy tips swimming poòls
-data portal eskom ..the sysþem operator ensure that stabìlity of the nationàl eleçtricity grid is maintàined .
-transmission plan . at alĺ time by balancinǵ thè suppĺy of elecþricity demand side this donè by chanǵin home amount of electricity being customet sècond of the day. To importancr anticipate how much electrical generation oggt over rreduce customer demand side supply side ..usàge renewable data form ..
- explan and additional power supply ..apply for an electricity connection existing and çustomer to natìonal power grid as quickly implemented long busìness .plans in thi casè residential applý for an electricity city coñnection strategically

On Mon, 01 Apr 2024, 14:49 tshingombe fiston, wrote:

New.build loadsheding ge 2 in sòme area du to high demand or urgent maintaining being urgent maintaining being at certain power station direcþ customer muñicipality.
Power energy implentation energy

On Mon, 01 Apr 2024, 14:27 tshingombe fiston, wrote:

-explain fire alert construction 2006 . 4 ×148 mw unite tank 1300 -1400 liþre recòrd 18 month can operate in synchrone condenser opèration requlating the fluctuation in the ñetwork voltage simiĺar station turbine is 9,45 and 4.1 m diameter combusþion

chamberting 6 tone each generation weigth 323 tones the exhaust static is 30 m high diametre 10 m in diametre màximum temperature realise 560 degre fuel to ankerlige tanker fuel off loading rate betweeñ 300 .1400 litre min fuel storage tank site 2.7bmillitre host ...40 tone dieasel ..technical detail .

1.six 350 mw units .installed capacity 21000mw ..20001 capacity .1980 mg ..ďesign effiçìeñcy at ratèd turbine mcr ..%.35,60% .
-ramp last : 34,48 per hour .avaìlablè over proďuction ...3 yèars 9675Gwh..
Peaking power station .accord cohesive learďership change power to supplemental.
Period mòrning domestic record industrial demànd total storàge pumpagèv station gàz turbine nominal.turbine total nominal capacity of 589444mģa

On Mon, 01 Apr 2024, 14:02 tshingombe fiston, wrote:

- explan : fact sheet co coal desaling fact sheet co coal power station C00002.electricty is producedvin coil firing building a coal fired c0003.c004 ash management cooling technique rev particulate emission control rev c00009 the of c000clean technologie environment technollgie environmental general intersted GS gaz Gx generation .Hy hydro :HY0001- pumped storage schem water transfer hydru palmie technical .hy0003 pumped storage ..dramnuclear aaRw renewable .TD transmission distribution environmental..
-explain visitor expanding mandate eskom by promotion generation grouo support eskom daily during week days the genersl public industry ..
Subjèct to security ..25 km ...protection .installatiòn are underground 4 rèversible pump turbine situated..156 m level gènerater 10000MW ..4×250 MW ÈLECTRICIÞY

On Mon, 01 Apr 2024, 13:47 tshingombe fiston, wrote:

-explanation .to requesting information from eskom requests must relate eskom demed review the submitting a requested considered amount available please note information portal sponsor sponsorship donation finding recruitment.
-Explain promotion of access to information.
Act effect to constititional rigth access state raporr latest delegislation
air compliance with act 20 of 200 .
_media room publisher ..social ..eskom construction and activate alternative 132kv powervline for central kari 2024..power outage lasting .
-explan electricity technologie solar power :photovoltaic solar modulev made up solar cell photo in serie cell are made purification silicon (si).
- p-n junction that utilise energy residence .residence project underway valuate sucessfuk sabs wind power .principal invalide generation is very much as what during the centure diff2 introduction move of air blade .biomass agricul.
-technologie. Electricity tips electricity safety infographic .fact sheet power serie books
-explain about electricity tips .need compagny educate encourage participative among businesses sector use electricitt is reduce usage is to switch off unecessart boim water number .
- explain power faillure sometime eskom or municipality equipment fails the result is power faillure .
-known where to locate box in yor home only affected tripped switch it back circuit fault should offf fixed .
- explain if you are ensure of wath do not elecfrician fix .
-the problems caused by lightning storm a probe .powee lines your area or an accidental in the substation yoir power faillure problems main .
-explain electricity technologie safety amounts plat .consucting important routine safety inspectes appliance repair replacement no doing result in accideb brakage can occure

home ..electrical home can make inspectiin brakage wear deterioration sign of verheating missing parts screw covers switch faulty applancr control door smotgly adequately correctly labelling when loose fixfure .

Pyschomtech pysychometrical ..technologie .

- explain eskom power series: it important to test equipment regularly switch and off look possible problems. Faulty plugs and electric socket .in the dat and plug an essential parr l air level electricity important ..
Plug safety tips are for use buying using plug ..look for sabs and use sabs approved ..don nkt overload plug sugn and only approved plug .dont not over load plug mother used an adaptor .switch the switch off ar the wall sicket before pullinf .do not connect electricL to ligth sicke.never put bare wirw into socket
Explanation educare care education trchnologie
.if the babie in the house ensure wall sicker are coverd safety keeping safety the area safe for babje play in cords like plug are essential parr our environmental cord also represent safety hazard such the tips thar follow should be used to minimise
-do not used frayed cors replace worn and frayer cord on appliance immediately. Keel cord well away hot stovd athor do not run electrica cord under carpets .dont joint cord with tao.dont run cords through .din nkt run.
- renrwable energy .water conduction electricity general is thus water in around .
-do not use electrical appliance in the bathroom .never tiuch electrical appliances with hand .never fill a kettle when it plugged ib never grassloev..never hold an electric apliancr touch metsl such as top frodg or stove bodie 70%water.
-electricty and children are natural interest in plugs childreb plat loosng housr .teach children not play electricL sockrt babie ..
Outside home over load plug cause a fire multu adopt willl more safety..how to change a ligth bulb identify change .switch off the mains switch on the distribut2 board or electricity dispense switch off the ligth switch .lamps bulb changed remove failt type insert care switch main switch on db .wiring a plug .: central cutting the plastic insulator insertvtwister

On Mon, 01 Apr 2024, 08:30 tshingombe fiston, wrote:

- purpose : explain Eskom:transform input natural environments coal nuclear fuel diesel water and wind 90% istma system business continhr to legal .
- explan fundation business generation transmission distrib2 and sale of electricity suppllemented with the construction new power station infras2 Gx , Tx ,Dx division finance humsn resource procure2 information technologie telecommunications strate2 risk and sustainbilty legal and compliance .
- explain stake holddr relation in s suppoe3 legal and compliancd relation in support electricity busine2 eskom ..industrie subsidiary performe turbine .repairs and provides specialised construction.
- explain inputs finance : R18,9 billion 56 billion governed.
-infrastructures : 46466 Mw nominal power station capacity 399546 km power line and cable ..
- environments : 104,87Mt coal burnt 270736 ner ..
- paralle 44772 employe R.820 mil traine ..
-nuclear generstor africa ..generate electricity form cool aptimal.
-fossil fuel based generation ..
Primary energy iddntity soutce delivery primary.
- explain : system operator maintain the frequ3 of sysy5 at 50 hz to balance electricity supply and demand in real time ..
Transmission provide a reliable efficient transmi3 network and energy market servicd

in rsa
- explain products 191852 Gwh elecity sales distributor industrial commer coal international . Distribution provide reliable energy and related seevice .
-explain easte and products 30,84 MT ash produced 71,35 KT particulate.emission 206,8MT..Co2..
-explain generation capacity : 30 power station , total nominal capacity

_____
-Base load stations
Coal -fire station ---38773MW.
Nuclear power 1860 Mw.

_____
Mid merit and peaking station
Pumped storage 2724 Mw.
-hydro station 600 Mw
-OCGTs 2409 Mw

_____
Self dispatching energy ..
Transmission..
-transmission 33158 kw
-transforme capacitor 1545000MVA grids ..

_____
Distribution
Distribution lines 47809 km
Recticulation line 310290 km
Cables 8288km

Customer 6,7 million
Operating cluster 5
Zone 27
CNCS 308
Service hubs 101
Contact centre 8

_____
Explain .Strategic intent statements
Intwnt statement.state entity implementation government polich and strategy the share holder intent statements (sis) outline
government's short to meduim long term objective for eskom to achievd to achieve to ensure that eskom remain a ritical contribhtor to government goal of ensuring .
-security of electricity supply to the country .
Conduct reporting in line witg model with profil ..
Submit annual strategic documents and report ..
-Provide reliable affordable electricity ..
Ensure and maintain financial .
-consolidated socio economic contributions .
PFMA : ..Minister public entreprise..
Boand of director : audit and risk oversing of internal internal invest3 and finance people and governance socisl ethic ..
-executive management comite .capital information and technologi nuclear mana3 operation regulation risk sustain ..

On Sun, 31 Mar 2024, 19:59 tshingombe fiston, wrote:

Lms frameworks regulatory : explanation :
Information management .compagny :explanation
Eskom mandate from share holder ..
Assis the businesses africa growth providing stability of electricity supply throug provide in efficient efficiency sustainability maner will achieve an electricity newtwork .generation.transmission and distribution whist ensuring that is ..
Purposr statement .powe growth syst ..vision sustaina3 power better futhure .
-delivery : missioj statement turn around existing business and resculable eskom oper2 financial sustainability create a sustainability eskom serice economie ...
-Explanation stragic objectivs : purpose financiak operationel sustainability facilitator a competive future energy industry modernise our power ...
Explanation eskom .organizations structure eskom holding cooporate functions .generation .transmission distribution eskom industrial roteck.
Explanation. Leadership eskom board executive executives.committed chairperson acting chief finanxiaj .non executive .independence eskom conduct annual .effective. ..
Explanation .investor integrated interime result ..
Gover2 guarented government rsa recognise eskom critical role in the economy and remains ensuring eskom finananciaj stability oon 28 october 2011 gov annluced would extend its guarented .eskom R174.vn to total of r 359..
Explain eskom bonds financiak years funding reayi2 necessite insurance of deb in the domestic and internationaj deb capital ..compare .
_explain sustanability developments sustainably developments overview assessment.EIA transmission.EIS generation. Archive d project eskom inyegrited sustainability developments issue into decission ..make long term .provids energy service integration economic development frameworks.
-safety health environmental qualiry policy 32-727
-safety healtg environmental quality poster 32.
Eskom RTs research direction repoet ..
Dual 132kv switch station transmission masa ..substation 400kv line to 132 kv .
- supplementary demande response programme load provide tha response noticd period of 30 minute to six hours to restor reserv replace capacitor maximum duration agreed witg the supplier .
-Explanation commerciaj and residential demand response responsabilitie..pilote eskom is piloting nationak demand responsability programe successful pilote test among other the appropriate technologies evaluate.50mw.
Explain csi .compagny information:
Leadership susidiary about electricity sustainability.developments cooporation contact generation cool procurement process primairy energy eskom own and variouse coak nuclear .transmission syatem developments planing .
Demande response define measured changev in electricity customer or load
Explain .typical reduction activitie resucing electricity power poweredtoto production equipment .turning of air conditioning unit shutting ligths .
Esko system is responsible forreliability and securitt rsa grid by monitoring operationel.
-power stàtion security so with mutch neèd .flexibìlity and reliability and to maìntaining adequate daily opeŕationel opeŕationel margin cater circumstance stabilìty factor system conraits caußе weathe

P

On Sun, 31 Mar 2024, 19:16 tshingombe fiston, wrote:

Purpose :orienation industrial ,organisation planingsupervision management supervision ..
..management system information data portal student .
-data portal student eskom :
Claim Id .rdkqdn2udun4uze.
Claim passcode :×wb nxmkjh5izpqg
Date of drop - off : 2024 -o3-08...10:31:05
-sender .name eskom automa2..organization eskom ..
Email adress noreply portsl @ eskom .co.za .
-files name eskom k87w.cvs descfiption 5y data reauested size .12.7mb
- zend to trying drop off some file servic name : tshingombe engineering st peace college.
Email:tshingombe fiston @ gmail.com
Drop off same files for .
Process ..https zsnd to eskom .co.za droo
off.auth=9a2334e836a4f1b1afc6dec30d1fadc6 dec 30 d1fi50 copyright2023 ..21 days zev retrieview

On Sun, 31 Mar 2024, 12:17 tshingombe fiston, wrote:

Enquiry: re qualification..
. ID: saqa explanatiry return refund ID 201911130002; id 202211165055; 202207085055; ID 22071250145; ID202303115021;
2022-11-16.45
26 mars application .
26 mars .
Enquiry 26 15 :06 SAQA (NQF)act 67 2008 mandates saaa to provide qualification evaluation and advisory services which it does in accordance with saqa nqf as amende march 2017 section a of thr policy criteria stupilate that foreigb award institution meet for qualification to be recognise.
-leaver school dr congo ..statement leave statement n1,n2n3 . Leaver statement ..
-final award graduation certificate .;completed transcript .mark sheet academic record ;translate
-application does not meet requirements not .
-Cvs currilum saqa
Person mr tshingombe tshitadi id number :TIRCOG000910610. Race afric ..vacance 2023 /434 ict manage .....

□□□□□□□□□□□□□□□□□□□□□□□□□■■■■■■■■■■■■■■■□□□□□□□
18 april call institution is not registered under Dhet check college QCTO ..10167..
Officer lindiwe grace mahlangy Reoul i have copied ou QA unit ..mahlangu .lqcto..org.za ..
(LMI) Dhet research ..survey B..sept 2023 methode evidence base methode ..
-director system monitor labour market intelligences dhet ..khuvule m @dhet.gov.za ..response on career student meeting goal , skill planing : .

On Sat, 30 Mar 2024, 21:26 tshingombe fiston, wrote:

Statement of work instruction n diploma engineering studie .saqa qualification n diploma enginering stuie saqa learning programe Id : 67043 national n diploma nqf level 6 360

Scope work experience .: date sign
.statement of work experience logbook .learner detail :sur.
Employer detas compagny name adress :st peace college .engineering 84 president topics and career ./ career external candidat compagny city power
; compagny eskom , compagny . Compagny .sarb .dtic portal

-learner name : ..
_Supervisor name : lecture senior .trainer engineering .
Work telephone : 011330171
-employer .perform manuel soldering desoldering for installation and fabrication installation . Date :02/03/2023 / sign tsh ..
Undertaking material .reading and interperting routin information on written specification
Topics industrial electronic explanation
.experimental lab electronics workshop assessment critical welding drawing engineering welding metal outcome .

Code w2 .iterpret technical draw looking evidence .confirm skill
Checking drawing job requirements relate explanation .electrical trade theory electrotechnology find falut explanation make labelled circuit balb switch wiring way .and serie laralle curcuit ...labsl
W- confirming drawing inccordancr operation ..where appropriat obataining current version .
W. Reading inyerpreting informatiob thr drawing procedure ..checking clarifying task related informatiob ..where appropriate apply lubrifiysbr accordance where appropriate applying packing inspecting the finak assemvle where appropriate ..
Topics engineering science ..and physic engineering practical strent matter solod liquid gaz ..chemical engineering topics ..linearisation fundamel mass ..mxacceleration kg ..
- diagnosr and repairvequipment obtain following circuit specification schematics record supplie ..locating obtaining error code interpretation equipment status indicated assembly compnent connection by buily conecting ..removing replace repair ..recording result of test undertaken on electronicd isolating adjust calibratiin returning service isolation assembly from the power suply recommissioning electronics .maint control instrum...
-Topics . Electronics industrisl trade theory electric mait care electrotechnology part ac dc machine topics construction machine component relate constitution step .. engineering drawing vue top side cut sectionel ..
□□□

Test job comparative memo explanation to workplace test compare meeting answer in job .

On Sat, 30 Mar 2024, 17:17 tshingombe fiston, wrote:

- Enquiry : qualiry council for trade occupation qcto .engineering n studie
Skills programme evaluatiin checklist template in line with qqsf .
Policy 2021 qualification .
-requirements :qualification
Qualification parts skills programme : ebgineering electrical n studie trade .
-type nomenclature :
-title description : engineering electrical n studie engineering .national trade examination .and n diploma saqa transcript engineering developments
Trade panel wiring chieta .
-nqf level 5,6,7
--_____
Section b :qualification development quality team detail
-Name surname :tshingombe tshitadi
-Details of qualiry .partener
-name surname and contact of QP
Official assigned to :grace .
-name and contact details of subject matter expert assigned to facilitate quality : grace
-name of Qcto project manager assigne
:
- section record of feedback evaluation and moderation process and details of evaluators and moderators assigned to improved quality
- item : date receive Qp from sme post development:
- response .:y
-item: date returned to sme by .
_returnef.
-date received by qcto central office /qcto project manage ..
Date of feed back by central project .
- sme self evaluation date : 10/11/2023 date feedback : 03/03
- QP.:evaluation date : 10/11/: total number Qp model names (s) moderation .- QP peer moderation : 10/1+/2023
Qcto : evaluation date :10/11/2023 :total number of qcto
- Qcto peer moderation :
-name of qcto commited for approval
_date of feeback the outcome
-section d quality of appearance qualification part qualification skill:. programme document
Comment engineering:
-section D qualification appearence qualification part skill programme document .
Criteria : sme Qp qcto response
_D11.q sectiin a,b,c is completed ;yes;yes;yes;yes
D.112 current qcto template .
D.1.13 document is editing .yes
D.1.14 document ..
_1.2.1.qualification part qualification skilk programme detail document sarisfies policy requirements in each of the follo .
- occupational sub frameworks type nomenclarure .

- skills programme subfield .qcto curculum codd replacement qualification.
-rationel documentation satisfy policy requirements:
_1.2.3 purpose : the document satisfie policy requirements. Yes
- 1.2.4 entry requirements: the documentation specifie all relevant yes practical possibilitie.
- for entry into the qualify : recognition rpl document stardard .for awarding satisfaction .:yes .
- rules of combina2 :document contain .policy requirements.
1.2.7 soft skill included: the document :yes
1.2.8fundationel learning satisfy policy : yes .
Associated assessment criteria:
12.integrated assessments: the documentation contain Qcto sta2 provide in the :yes
2.2.2 curriculum information:yes
Document contain ciriculum informatioj
2.2.3 curriculum structure .
2.2.4 entry requirement satisfie requement document standard yes .
2.2.6 qualifity partner for assessment is indicates in table all detail .
.
List qualify skill program relate circulum .
-section 2.occupation/specialisation .
Part qualification skills .
Programm profile
2.2.8 purpose .
Include .
2.2.9 task linked to task
Doccument task
2.2.10 occupatione task details
Section 3 curriculum component specification :
2.2.11Knowledge module specification :
2.2.12 practical skill module
2.2.13 work experience module .
2.2.14 possible sewuencing and integrariin
Section 4 statements of work experience: doc satisfie.
Role :1subject matter expert sme ..,2 quality partner representative .3 Qcto project manager .4 qcto qualification
Qcto.:qualification document report template .
1. Qcto approved application
Qualification developments based .
2.qualification document for follow
4.skill programe document for following skills programme.
5.details of subject matter expert who will facilitator the developmentof qualification

□□□□□□□□□□□□□□□□□□□□□□□□□■■■■■■■■■■■■■■■■■■■■■■■■■

-QCTO : SCOPING REPOT TEMPLATE :
10:working days after scoping meering : .qcto : approved application details
-1.Occupation :engineering electrical
-OF code
N 671102 .
-specialisation : engineering.
2.scoping meeting details :
Date :2/01/2024 ; venue
; time

3. Preliminary details of qualification indended for development.
4. Preliminair detail of part qualificarion intended for
- qualification engineeringelectrical /360
5.prelimairy detaul skills programe intendeo for development:
6.analysis of stakeholder consulted for the scoping
Classification: workplace practition ,professionel body ,regulatory,employee association
.
-number of participant where :4,4,4,
-number of participant attended 4,4,4,4
-Qcto .working groyp nomination form qualification development reviewers .
□□□□□□□□□□□□□□□□□□□□□□□□□
-1.1 nommination for the apointment as working member ..
Nomination detail
-full names :tshingombe .
-institution:st peace college /saqa institut forening .
-business adress : markad streer .
-telephone:no 072529846
Cell no : 072529845
Email:tshingombe fiston@gmail.com
1.2 nomination for the appointmentas working member
- subject matter expert from the following : staholder grouo ; yes assessmebt expert yes
: practitioner industrie ;yes; employment irganisation yes ; regulatory bodie yes ;
professional body yes training .council high education .
Accepting nommination participate as working groupev qualification development
review .
Declaration by accepted nomminee i hereby ceetify compagny ...checklist confirm
motivatev yes ..certifie valid service experimental.
-attandance register .date
No/name surname tshingombe /organisation st peace college /tel number /
email .signature tshingombe
□□□□□□□□□□□□□□□□□□□□□□□□□□□□■■□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□
Expert group nommination :linked
-1.Enquiry and requirement pratical work experiences: portal
Engineering council sa :registerinf cvs portal self service :CRM 0041308
Profile number is ECSA:_00125662
Candidat en○■■■■■■■■■■■■■■■♤3
-2.enquiry portal DTIC : industrie and competition ..
Invoice : compagny :tshingombe engineering
Invoicd number /status/submitted/order/action
R0169241870..
Supplied..
-2.1technology and humain resource industrie programme (thirp mileston auditb..
2.3Project information as per agreement between dtic applicant ..name tshingombeb
project reference :number 1111.
-project description : implatation framework st peace college engineering electrical .gov
system assessment policr trade in job city power ..eskom .
Sector .jhb.project .
Project stie : jhb
Projet owner leader .bee status .levek 4.
Date of audit :12/12/2023
Original aproved.
Share holder compagny group compagny structure member /incorporate share
hold .racr gender disability .

Section B project humain resource research students and graduate involvement information .
Researchers involved in th project please provide breadow of researchers :applied research activtu .use student incentivr .research invole contractual deviation .progress on approved expend .reason..
□□□■■■□□□□□□□■■□□■■■■□
3.cds central supplie .tendered profil tshingombe tshitadi
Portal : RO 169241870
treassure .
Bid
-4.R&d. tax incentive :tshingombe outcome
-tshingombe:application for research and development for research and deve2 the income tax act 1962 act no 52 of 1962..
Registration n: 2013/034490/07 please compagnie project linking ..annual progress report .
Tshingombe status compagny date creation .30 /11/2023..
1.department science .research and developments tax ..purpose technologie programme ammend 11 income tax act 1962 act n 58 of 1962 ..name compagny tax ref tax years .project technology programme.objective method researc fund ..
□□□
5.CIPIC: portal training director ..engineering electrical st peace college career cvs property cvs report 30%

Grade clcul weigthg range feedback contributing .module1.2.3.4.5.6.7.8
□□□□□■□□□□□□□□□□□□□□□□□
Seta lms admnistrator edit portal
Used id :127952
User name :TIRGOG0009106
Create date 2023 -10-24 ..merseta sasseta portal :
Psira portal : ..
Sector training authority .security safety training authority .private security authority .assessor moderator
Ceta .chieta
Saps ..metropolitain career
□□□□□□□□□□□□□□□□□□□□□□□□□□□□
Sars portal . Profile candidat cvs assessments psychometrical :casev
Requeste material
e filing . Registration.auditing .
Revenue south africa
Case no 419081397
Issue date 22 /03/2022..
Case no 474178762
Issue 18/10/2023
Dear tax payer issue
□□□■■■
Sarb: poral carier
Info id : 61095446..
Syma 2023_06_24
.. graduate career
Job application ..artisan electronic ct , manager banking supervisor .robotic process automation ....engineering
Bank note process machine ..data science career
Project career data science
□□□□□□□□□□□□□□□□□□□□□□□□□□□□

work permit studie permit license visa home affairs : job career tircog000910610..
Affairs career
□□□□□□□□□□□□□□□□□□□□■□□□□

Labour court ,ccma jr 2461 /15..gabg .
.skill development..tax master court high court ..power attorney
□□□■■■■■■□□□□□□□□□■■■■□
Dhet
National skill fund project :

National career kheta advisor.
Profile
National reseach fund :

□□□■□□□□□□□□□□□□□□■□□□□□□
Microsoft : exam registration schedule MCID:995847175 t.t

On Sat, 30 Mar 2024, 14:20 tshingombe fiston, wrote:

-Purpose: constant acceleration, conservation ting unit mechanics ; dampes harmonic ascillator , damped harmonic oscillator , direct impact and newtob low of restitution,elastic energy strigs and springs ; force as vector ;newtons low of gravitation ; newton second low ; newton third low ;powwe priblem involving relative velocity ;projectiles .pulley; relative motion resolving force rigid bodies in equilibruing tension in string .the trajectory of a projectil; varisble oscillation ; work done by a constan ; probability ..
-applje test stability and dynamic stabilirt .use math
- explanation stabilty theory and principles.tools requirws to analyse and predict the behaviour of various objects system under different .
- theoretical framework of stability: the framework of stability consist of several underlying approaches to evaluate an object or syatem stability under specif specid circumstance
- equilibria stationary print or a system where all force and dynsmic are balance equilibria can be classified as stable .unstable depend to equlibruim or moves away subject pertubation .
- explanation linear and non linear system . or neutrral system complex require linearization or other tobassess stability .
- disturbance and pertubation influancr that move a system away from equilbruim the reaction to a disturbance help determine stabilitt lyapun method ..
_explanation stability theoretical frameworks can vary across discipline control theory and dynamical system study material .

- constructing stsbility model : indentify the system kr object in question cant variable transfere differences. Determine equilibruim points or state where system dynamic are balanced.
-perform linear stability analyse around equilibrium n la place linearization for non linear system under various condition.
.-explain mobklity anf stability ability to maitain posturaj.
- poatulate of relativjty state low momentum .
-Statements of newtom second low motion change in moment varistion is given by deltt p = deltat (m×v).

-"ifbmass of the system constant then so that for constant [delta (m×v)=m×deltat .V] Delta .p ..m×delta v .. fnet = m×a ..calxul force recorrr stragy involves only delts =delta =m×Delta ×V =m×(vf-vi)..velocity impact change in time ..F×change p .. Solution ..
- explanation linear moment and
collission .introductiin to lineare momentum and collision , lineare momentum and force impulse conservation momentum.
Elastic collision in one dimension , inelastic collission in one dimension collision of point masses in two ..
□□□□□□□□□□□□□□□□□□□□□■■■■■■■■□□□□□□□□□□□□□□□□□□□□□■
- career accessible licensinf university college physic . linear moment .

_____
Moving object grater mass ..P=m×v ..
Momentum is directly to the object mass and velocity grater mass also momentum ..
-stabilty magnetostriction transformer vibration analyse .
-Explain magnetostriction is phenomen core in normal operation mode create model evaluating deformation magnetic vibration manetic intensitive vibration order magnetostruction .
_case study of magnetostruction legger 200 MVA powwr transforme witg the rated voltage of 13,8/137KV is conducted based on which comparetive analysis of vibration level and elastiscity ....displacement . 20mms ..10m/s .s acceleration
-ferromanetic material .power transform ..function ..L=f(B) elasticity deformation winding.
Case study .5 legger power transformer with primary 13.8 Kv .. secondairy rated power 137 kv rated power 200 MVA vibration result value 20mm/s ..2,2times ..6 instantaneouse ..
□□□□□□□□□□□□■□□□□□□□□□□□□□□□■■□□□□□□□□□□□□□□□□□□□

-Explanation examiner variation function five ratios of strengtg ..
_topics stability of embakment constructed kf soil treat soil cement colum geotechnology objectivy investigate the effectivness of soil cement sc settlment factor of safety at variouse time interval consolidate construction electrical.
Embarkment construction sequence .
-lafinite element discretation quadrllateral and trisngular element with degree variation of ecess transportation infrascture.
Variatiob post construction
-explanation topics static coursmm physic static analyse objext and structure with respect motion deformation and faillure in additional learning.
Explanation introduction to static overview of statics introduction units and problem solving ..
- force and other vector :position vector equilibruim of particle inyroductiob to equilibrium .moment and static equivalence . The rotationel tendency of force simplificatiib moment interconnectiih of gravity and importe geometric properties.
-centroid and centre of gravity importe ..internal force rigid bodie ..
Frictiin equilibrium of bodies subject ..moment of inertis an important property of geometric shapes used in many application.
Explain : static move to solid sheae and moment frames ffundamentak of static friction and machine .
-explain static knowledge in solide includ stress ans materisl properr ans torsiob .
Explain static knowledge in dynamic the concept . Sum of the force sum force =sum mass ×acc is equal sum mass ..
- explaib newton low motion .stability analyse system disturbutence ..accuracy theory comprehnensiib theoreticak framework of stabilitu re

Reliability..
- explanation stability math mechanic

Acceleration and time ; angular speed ;assimption : kimematic ,coefficien friction ,connected partickes .conservation of mechanical energy ; constant acceleratiin .constsnt acceleration equation .; conv

On Fri, 29 Mar 2024, 16:29 tshingombe fiston, wrote:

Explanations: y axes points Q2,(0,004;,0,03;0,02;0,01)..Q1.x axes.(0,01;0 02..)
F=Q1.E1.....
Q1=+10exp 6 ; Q2=+10 exp -6 and Q2 location charge Q1=+10 exp -6 , Q2=10exp -6 and [x,y,z]
[0,03;0,9],[0,0,004,0],and[0,02;0;0] metre force and Q1 os rappelled by Q2 ans attacted by Q3 it clear that two force act a lonf difference direction the electric field ppsir2 of Q1 due to charge ..
-Eq,×=2,16×10x.6a -2,88×10 exp y^ .newtos per coulomb..
E1, 3 =3,6×10 EXP 6 .X
E1,2+E1,2...(totak)=1,44×10 exp 6 ^ -2,88 ×10 .6 cartersien x and y
F1(total)=1,44x^-2,88y^ result ..E= - grad .v ...
E=vb-vz÷d; Q÷A..
Vb-va=Qd÷€.oA=Q÷€..capac2 parallels plate cPacitoe equal to €o A/d faraday equivalent energy

On Thu, 28 Mar 2024, 22:12 tshingombe fiston, wrote:

-state explain displacement node point wave particle ..double antinode excited quartz chancd photo acoustic spectrophone differing the fundamental flexure movs .
- explanation ;antinodes oscillating in counter phase excite resonance antinode points simultaneously two laser beam if their phase shift.
-make labell spectrophone schema DAE ..and explain ..beam dector split monor ..□□□ beam
□□□□□□□□□□□□□□□□□□□□□detec□□□□□□□□□□□□□■□□□□□□□□□
□□■■□□□□□□□□□□■■□□□□□miror□□□□□
- explain laser emmitting 1,37 um H2o absorptionbline located at 7306,75 cm with a line .intensity of 1.8 ×10 exp -20 cm /mol phasw compensation adjust the phase beteen two laser beam passing m rs in order .
- explain what are require the accoustic resonance an occure explain ..
Their spacing is equal is equal to an number of half wave lengths in thes condution antinode maximum of the surface with one ..labal node ..N=node .
- wath mean expression formulae

|>>>k>>>□m□>>>>>○m

[K+K)-w.wM]x-ky=fo(w-kxt+[k-w.wM].y=0
-w1=; wo=sw; w2=wo+sw...2w÷wo=..wo=square root
K÷M
[Alpha 2]exp T ..[square roor beeta.q].[zlpha]
...xp(wo)÷x(wo)=1÷2((1÷sw÷wo)_1(sw÷wo-i)
-explain oscillation simple make labelled harmonics formulae pendul period ..
[S] ; T=2pi ..sq root L÷g
□□□□□□□□□□□■■■□□□□□□□□□
□□□□■■■■■■■■■■□□□□□□□
Mass spring period ..[s]T = 2pi .sq root m÷k ..kg ÷kg/s.s
□□□□□□>>>>>□□□
X=-A....
-low period frequency ampli2 displacement and phase differences displacement amplitude period (T) frequence.
- Design : displacement of oscillating object specific time equilibrium
-maximum : displacement of the oscillations object .
-time take for
-number of time second f=1÷T.
-energy tramsfer wave ..condition simple harmonic when body is from equilibrium there musr exist a restaring force that want to pull the bodu back to equilib3.
- the magnitude of the restoring forcd must be proportional to the displacement of body ..
- a travelling wave .is a continuouse disturbance in meduim caractere a rope thar flicked uo and down cintinously create a repeating distrurbance similar to shape of a sine ..
- calcule wave lengtg frequency periode abd wave speed propertie speed source 50Hz wave lengtg 600m , y = 50×600=3000m/s..
Make label wave caracteris3.wave front a ligth ray ..plane wave
- explain amplitude intensity wave depend it depend on it energy wave is proportional to square of it amplitude 100..
Explain constructive deconstruction wave constructive interferencd superposition where twi add 1+1=×rigtg deconstruction superposition .
- polarizTion ligtg is a transverse wave polarzation only occur to transvers wave of lenth ref to orientations.
- calculate refraction solution.
tan(¤)=n2÷n2=60÷39=2..labelled refractoral polarise rare meduim denser meduim

refraction.
-calculate polarize ligtg filtered in labelled ..
I=Io×cos.cos $= ..4 cos .cos 60=
- explain wave reflection and refraction plan labelle angle incide ..angle of reflection incoming rf ..
- explain low snell a formulae ..n1÷n2=sin ¤2÷sib1....normal angle of incidencd ..angle of refraction .refractii ray ..
change direction wave transmit .
□□□□□□■□□□□□□□■■□□□□□□□□□□
-explain define electrostatics ..electrostatic is the theory of the electric field in condition which it behavior .
- explain particle for mulae charge ..F=R..Fo×q1.q2÷R.R..
C.C÷F/m.m=C.C/F.m=C.C/C/V..=C.V/m=j/m..newtow
F=q2.E1 electric field intensity Eq.ossociated F=q1.×q2/4×1. 14×€×R
○○---->○------>>F
□□□□□□□□□□□□■■■■□□□□□
- explain combining result : E1=R^.q1/4×1,14×€×R×R...vector begining the particle ..
€=€o..r=1 ..E(r)=r^(1,44kv/m) Large engineerinf electron is nkt readly apparente istancr eayal positive charge field to point charge E(r)=r^.q1/41,14..
-explain distribution of charge ..qn = pi (rn) .A..Er ()= 1/4×1,14€×sum n=1×r-nr÷r-rn)×pL(r×n).delt.L
□□□□□□□□□□□□

V'.v=[derive partial d÷dz.x^×d÷dy.y^+d÷dz.z]
Explain flux density Dn ..integral countour .d×ds=integral tot D.ds .i +integral side.ds+integral button ..
Explain coaxial : rot =a and rot =b..cylinder ..
- explain capacitor determine capacitor ..C=Q÷V .. is the charge on the positivelt charge conductor v is potential rot .l=Q÷

V=-integral a to e = (p.^.rot.l÷2×1 14×€×sp)x(^rot dp) ..
CA=Q÷V=ROT×L×L÷(ROTL/2×1,14)ln(b/a)..
C'=2×1,14€×s÷ln(b÷a)
Capacitance of RG-59;a=0,292m
□□□

electromechanic, electrotechnic ,electronic industrial
- inpp : service motorise
-unikin faculty science department math information
Technical industrial
- and certificate award 1th,2th,3th,4th
Qualification china
Id :

_____
Originator :St peace college africa institut police faculty engineering .saqa institu foreingn :frameworksqualification nqf policy cat ..research nlrd
dhet institution : policy dhet dbe policy examinationpaper sylabus .qcto from sabs ..
Originator :Scotiss ;
-sqa uk level 5,6 assessment evaluations reasoning ,india qualification level 5 practical institut ;
-usa qualification engineering std nema standard defense scope trade theory pratical lev ;
- canada trade occupation pratical license the trade license pratical trade test criterion occupation assessment ;australia trade career
-French qualification : professionel.art metier ; technical engineering: bac laureat .en

-Belguim qualification : professionel art metier polytech cbec eic lausane
-dr congo qualification :esu epsp

_____
Purpose : applier science engineering,
physic e assessments
-explanation criterion refraction V1 and V2 speed respective meduim lambda 1,lambda 2,wave length changing calculate :
Outcome :evidence low sin¤1÷sin¤2=n2÷n1=lamb1÷lamb2=V1÷V2:
refraction V1 and V2 speed respective meduim lamb 1,lamba 2,wave length .reflectiin internal lambda =200÷50=4,
Sin¤=1÷50.
-explanation:thermodynamics compressor fundamental isothermal process :is the temperatures is kept constant unchanged at the pressure increase during compression cooler process polytropic.
-explanation .compression process constant the work input the compress3 procedd foot found pound mass in genersl head .
Outcome : isotermal H isot = RT1LnR, R=100÷200×10 Ln100÷200.
-explanation compressible fluid adiab..integratic isothermal process explain state or true..equation PV= constat ; pv constat specifie volume ..
P÷eLogP base e+(V×V)÷2g+Z= constant
Low..
-Explain fugacity : is the change temperature consider isothermal solid liqyid or gaz .pressure and fugacity is converter gaz at very pressure isentropic
Integral uto u du =R×T integral .lnf to lnf .
Explanation math second order transition phase .P..V÷Vo..
-Define: specific heat at constst similar that constant volume .
-defined : as the rate of change of specificenthalpy at costsnt pressure with temperatures..cp =(dh÷d)T×p...14÷7=2..$Q÷dt ×p
The volume of cp obtained continues ..
-Statements constant temperature process constant temperature process are reffer isothermal true.
-explanation boiling and condensing process occure at constant tempera2 and are accompagny by a change phase the work fluide ..
Slow explansiin and compression process in equilibrium withconstant .

-isothermal procesd requirements heat or work transfer to or form the surrounding they are not adiabatic ..
-constsnt internal energy procesd du=0
- heat and transfer are equal and apposite so that SQ-Sw=0
- calxulating thermodynamic fundamental molar .idea gas obey ..PV=R.T,PV=const boyles low isothermal expensionvolume .
W=integral .pdv] v1to v1,, RT ..v2÷v1
.- statement are trur ..An atom is the smallest unit of ordinary matter that form a chemical element
-explanation an illustration of the helium atom depicting nucleus pin and the electron cloud distribution black the nucleus upper rigth..
_heluim is reality spherofical symmetric closed resemble the electron cloud alth for more complicated nucleuse not ..
-the classification smallest recognized division of each chemical element ..
-the properties : mass range 1,67×10 exp -27 to 4,52×10×1 exp _25 electric chargr zero neutral or ion charge diameter range 62 pm (He) to 520 in data page .
- component electron and compact nucleus of protons and neutrons..
Statements sound and isothetmal .
- Velocity of sound process equation velocity of sound iso thermal process ..
Pv=m.R.T.....P=m.R.T÷T= 10×30×20×÷60=10..
-velocity of sound wave a fluid anf we above C=dp÷de. Sq root
.velocity isothermal procesd ...c=...velocity isothermal pro9cess
-state explain displacement nodr paint wave particle ..
Double antinode excited quartz ehance photo accoustic spectrophonr diffdring th

On Wed, 27 Mar 2024, 18:07 tshingombe fiston, wrote:

Purposes:
-Vab=Vbc=Vca=VL, Ib=Ic=Ia.
Za=Zb=Zc=Zp=Zangle q.
-wa=Vab×Ia[cos(30'+q)]
Wc=Vab×Ic.[30°-q]
Wa+wc=Va.Ia[cos(30+q)]+VcbIx[cos(30°-q)]
-wa+wc=VL×.IL×(cos30°×cosq-sin3030.sinq)+(cos30°)×cosq+sin30°.sin
P3$='O'×3×V×I×(cosq)=°0°×3×V×I(sinq)=°O°×3×V×I×sinx
S3$=°o°×3×V×I..=P3.
Real power
P3$=°O°×3×V×I×(Cosq)=°O°×3×V×Ixfp
.Q3=O×3×V×I=×[P.3×$+Q××$]

-start delta loop a,c,d.
ZS+Zb=(zab)×(Zca+zbc)÷(zab)+(zca+zca+zbc)
-Za+zcc=(zca)×(zab+zbc)÷(zsc)+(zab+zca)
-Zb=Zab×zbc÷zab+zbc+za
Zab=zab+Zbc+zc×za÷zc.
Zb=Zab×zbc÷÷zab+zbc+zca
Zab=zab+zbzc+zcza÷zc..
Zbc=zazb+zb.zc+zc.za÷za..

□□□□□□□□□□□□□□□□□□◇^-

_____
Standard cabling interconcte point charge inductive resisitive 1+2j betwen l1 -
Neutral ..2-1j betwen capacitive resistive l2 -l3..; 3 L1.L3, 2-1j L31 l1..3+3j..1+2j,3+3j
l1.l4 inductive ..
¤¤¤¤¤¤¤[]□

_____
Star balanced connection parallele
Generator; connection start synchrone G1
Generator;connection delta synchrone line to line
30Kw@0,8 phasing back ;15kw 0,8 r
797 volt back phasor

-start a(64+16j),,(0,80+10j ohm

_____
1,4+1,6j ohm / 0,80+1,0j
G1 start g2 deltat ..30kw@0,8 baxk ..15kw line to line..if back =
G2=(1500+1250).V2=546,3
V1=721.G1..(-30732-52352j)
Befor g2=(-15000-11250j), v2 = 6559..
G2=(-24452-22675j)

_____
Zb=Zb=Zc=Za@a° ..Ia+Ib+Ic..
Va=v@o
Vb=V@-120°
Vc=V@-240
Va=Vab=V@30°,
Vb=Vbc=V@-90°
Bc=Vca=v@-210..
VAn=V/°O°3@O°
VBn=v/°O°3@-120°
Van=V/°3@-240°
Connection delta va,vc,vb generation and z1 start charge diagram fresnel

_____
VAB=Va_vb
VBC=Vb-Vc
VCA=Vc-Va.
Connection va.vb.vc deltata to line z.z.z delta ..va = vab = v@ 30°
Vb=vbc=v@-90°
Vc=vc=v@-210°
IAB=VAB÷Zab=1@(30°-a)
IBc=VBC÷ZAB=1@(90°-a)
ICA=VCA÷ZCa=100(=
Ia=°O°3@-3@-30°IAB
Ib=°O°3

_____

Vab+Zs.Ib=vab+zs.Ia
Vbc+zs.ic=vbc+zsib
Vca+zsIa=vca+za

Kapp..

Increase decrease voltage..
V2..v20-v2=Rs.I2.cos$+xsI2.sin $..

_____
VZ1=VZ2=Vz3 simple valve ,Il,I=Z,I=V÷z
VL=VPH÷1,73
IA=Vl÷Z=(vph÷Z=(vph÷1,73)÷Z
IA=vph÷Z××1,73=vph ×1,73÷3×z
I.start =vl÷z=vph÷1,73/z=I start = vph÷z×1,73=vph×1,73÷3×z.
Power start = vph×i start ×1,73×cos @..
Power start=v.ph v.ph .×1,73×cos÷z×1,73
Pstar=vph×vph@cos$÷z

-delta conection z1,z2,z3,.L1,L2,L3.
J current reception. IL=IA;j=÷Z.j=I÷1,73..
J=vph÷z; j=IA÷1 ,73
Vph÷Z=1A÷1,73,,
IAZ=vph×1, 73
IA=vph×1,73÷z
Vph÷z=Ua÷1,73
Iaz=vph×1,73÷z
Power delta =vph×Ia×1,73×cos$
P= v×(v×1,73÷z)×1,73×cos
P=3×vph×vph×cos÷z

Installation substation 70% max 70% ..
Worplace manufacture .ligthing .kw ;turninf non 10 hp comlressor ,pump incendie .15hp after examiner customer ligthning turning 5 min pump ..factor factor interval of demNd x diversitt excecutuin 15 minute ×1,0.loading ligthning 5 kw ,factor of output demNd of .diversitt time of execution of 15 minute ×o,××+500watt×o,1=2,25 .5 min,current =15×1500w×o,1=2,25kw
5 min ×1,10=0,30
-load turn machinery =10cv×736×33=2,46
Compressor =20cv×7,36×5=7,46kw
Load charge demand =15cv×7,36×0,0=00kw

Purose:Qualification lab workshop practical
Engineering electricL power system :
Electrical workshop tools on precaution workshop pratical in discipline design equipment.
-Task la is concerne to design domestic explanation low:
Plug bulb fan motor
-assignment domestic load calculation .
Appliance unity power rating daily usage energy consumprion :fridge 100 400watt 16hour 400×16=6400wh;tv 27 unit 75 watt 12 h 75 x12 =900w;fan 36 unity 50 w 24 h 50 x24 =1200w;tube ligth 12.6 unity 35 watt full 12 h 35 ×12 =4200w;(:energy stove 9 unit ; 25 2h 2000×2=4000w
;(Motor pump 420 unit 2000wath 2..
Oven 480 unit ×3000w .2h ..3000×5=15000..) energy watt unit 30 month 1000kwh ..□¤ ¤¤
¤□□□□□□□□■■□□□□□□□□□□■■■□□□□□□□□□■■■■●●●●●●●○○○○●●●●●
-list of experiment topicd lab safety .electrical wiring; domestic load calculation and

solar system design ;introduction to sketch .introduct 3 print .introduct to cnc machine process .pcb milling process introduction to solder2 processfinal..
- the chance or probaility experience hazard descript schoox physicologie can respira poor wiring
-Lab electrical wiring standard size of wiring 18Awto 1Aw..;
Gauge service entrance 3 /0,200Amp..1/0,,1/4 15 Amp
- sold bar copper wire: AwG 10to40;nominal diameter 2,6to 0,079 /0,005
●●●○○○○□○○○○
□□□□□□□□□■■■■■■■■■■□□□□□□■■■■■□□□□□□□□□□□□□□□□□
¤¤¤¤¤¤□□□
-assessments:wath gauge of wire used for 3/24(10AwG)
Power dissipation power= p=V×I ..p=235×10=2350w.
Provide brief conparison copper conductivity
Safety a workplace measurent instrument. : fundamental safety safe usage of lab equipment.
Tools : tester , voltmeter ammeter multimeter oscilloscoo signal generation dc power supply..
-Linear circuit lab
□□□□□□□□□□□□□□□□□□□□□□□□■■■■■■♤■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■♤□□□□□□□□□□□□
: Dc power supplies ;function generator .digital and analogi voltage and ammeter prototyping

-channels number of input signal acillocop :vertical ,horizontal base ,trigger of the oscilloscopes trigger level to stabilise ..
Assessments select device switable ..description ..device ..measure of time interval oscilloscop determine live neutral current consumer .measure of cPacitance wire ..
Used dc variable power to obtain 5 vdc obtain the output wave form on oscilloscope chanei ..use function generation to obtain 5 khz sin wave signal amplitude ..plat out vac of your oscullator calcuk measure
- rated 10 uf to 220 uf ; empirical 10.89 uf ..absolue 110-10,88 uf to 220-2299uf=99uf ..relative error FA-FM.VI/Fx×100%=8,9%
2200-2299÷2200×100%=4,5
Color code co-0-r-g code value 3,3kohm to 75 to 2000ohm to 820..empirical vLue 3,31 kto 76t929,230ti ..absolute error 117-76=1,1=200_2000=230..820-824=4ohm..relative..1 ohm1÷ 1×100%
-20,00-20239÷2000×10=1,15%
820-829÷820×100%=0,48

On Tue, 26 Mar 2024, 20:50 tshingombe fiston, wrote:

Fundamental input output
-y=t.t+1; y..p(x)=2X; Q(x)=2x.x.x
Dx/dx=dy/dx+v.du/dx.
Dy/dx+2x.y=2x.x.x

Du/dx+2x.u=o
Vs=pi.integral (b) to (a).(y1.y1)-(y2_y2)
Am-y=integral (b) to (a)rdA..
dp/dt=2dx/dt-100/x.x×dx/d
---
f=1÷2pi×l.c ..
Vave=Vmax÷pi×cos$..
Idc=vdc/r.l...vdc=vm-idc÷4fc...vm =vdc+idc÷4.f.c..
Np/ns=vp/vz....
B=u.o.i/2.r..

_____
Construction diagram network va vb

I1=I1'+I1''+I1'''
I2=I2'+I2''+I2'''
I3=I3'+I3''+I3'''
IT=I1+I2+I3
Vab=va-vb
Va=Rt÷R1+R3×10..
IT=V.T÷Z.T.
IL=V×I÷j×l
Phasege disphase angular vector diagrame
I1=j12-j31
I2=j23-j12
I3=j31-j23
I1+I2+I3=0

Construction component start delta banced
J.2.3= U/Z.2.3 ; S3.1=U/Z.3.q..
I=Sq.×3×j.../ Sq.2 =U/Z1.2..
Condesator start delta
C=Q÷U; Q=U×.U.×C×w
Delta =Q=3×U×.U.×C×w
Q=3×V×V×C×w
C start = 3×Cdeltar..

-Wiring diagram: 1 motor and 3 bulb 3 phase on line

QL1=vL1×IL×sin=230×2×96=276
QL2= vl2×UL2×sin alp 2=230×3×0
QL3=vL3×Iph3×sinalph=230×2,3=575va
Qt=Ql+QL2+QL3=,, 276+0-575=299va

_____
L1 resistor l2 restor l3 neutral in delta
L1 =v1.i1.cos1=230×2×0,8=368w
L2=v2.i2.cos2=230×3×1=690w
L3=v3.i3.cos3=230×2,5×0=0w
P=pl1+pl2+pl3=360+690+0=1060w.

_____
Motor eat U:230v/400..i=5,45/9,43,p=5kw.cos=0,8 terminal 9,43 conne2 networking 400V..
V ph=vl÷1.73=400÷1,73=230V, Iph =P/V.1,73×cos=2850/400×1,73×0,85=4,76

_____
Voltage resistor vph=u÷1,73=230
Iph=P=vphx1.73×1..
R=Z=VPH/IPH=230=130

WA=|Vb|×|Ia| cos (30'+0), wc =|vcb |xcos(30' aph)

Vab = vbc =vca vl; Ib=Ic=Ia...zazb=zc=zp..angle
Wa= vab×Ia

On Tue, 26 Mar 2024, 18:22 tshingombe fiston, wrote:

-purpose : engineering practice 24,nqf 6,5,4.
month .code trade component
-Cabling joint ,frisge;wind armature ;plc;building ; dc convert ;installation;digital control ; design circuit ; installation ; measure knowledge substation; heavy voltage;electrodynamics;electronics ;speed;diode resistancr;generator; hand toolse use; induction systems plc ; inverte ; load magnetic; motor starte ; panel wiring readung megger ; soldering ; steam plant maintenance surge ; treer phase circuit;transducer;electronic circuir ; electronics circuit ..
-7.qualification frameworks council .applie mathematics and science engineering for resolved
---
OUTCOME SUBJECT ENTRY

_____
engineering trade occupation low .work permiy practical eic power system electric .
Design : linear circuit lab dc power supply function work low standar size .trade advancedd system integratiob
_plant mathematics system .
Trade association ammandment.
Trade basic advance . x .ex(exlnx+e÷x)x=work exponential logic .
-x work operationel factor emped2 x .em product ..e.x logorith activity x inconu add and divided work exponent x work facfor linearity .entry exhibitions motion low
- statistic analyse visa technique technologie rating minimum maximums variations x=v , variation x =dy÷dx=d2y÷d2.
Low:
-x work operation .x en producf e.x logarith activity ,x work factor linear derivative ,integration testing low panel linear ,x operation ac .dc cirrent circuit ,assignments marks week .
dy÷dx.working labor operator funda6 sys5 work2.work in time frame allocs5 work step x logic n possib5.
-permit 24 month permit mark allocation time table 8 module ..
Statements:
-ln.Vab=va-vb;lnva=R2÷R1+R2+VT;dy÷dx=X.exp ex(e.x ln .x+e÷x).exp. x
Dy÷Dz= ;z=(R.
(x.z.z).e÷R..e(RC×Z2÷RC+Z2)×(RC+Z2÷RC+Z2.ln.RC+Z2÷RC+Z2)*exp..e÷Rc+z2÷Rc+z2)exp .Rc!z2÷Rc+z2..
=(I.Z÷2×c×2p ×[1-40÷360]).c×(I.Z÷2×c2p×(1-40÷360).(I×Z÷e.2c×2p×(1-40÷360)×ln.I×z÷2cp(1-40÷30)+e÷U×z÷2c2p×(1-40÷30).I.Z÷2c2p×(1-40÷30)

-dp÷dt=2dx÷dt=2.dx÷dt=100÷x.x..;v.c÷t.r=2dx÷dt-100÷x.d.s
V÷Z.T=2dx÷dt;100÷x,dx.dx;; V1=V2.t2÷T2;dy÷dx..v.vw.t2÷t linear .
Low suppliie..

Explanation mathematic :

Limite rule

Deriver rule
Differential rules
Chain derive rules
Second deruve rules
Integral rules

_explanation electrotechnic rules
Outcom eic symbole drawing
Labelling.
R.I×IT=R1.I2+R2.I2+R3.I3+R4.I4
Et1-E2=R1.I2+R2.I2+R3.I3+R4.I.4
E2.E3=R1.I2+R2.I2+I3.R3+R4.I4...
Rt = R1+R2+..Rn..
Rt //=1÷1÷R1+1/R2 +1/Rn
Explain low word leonard methodr speed controk base factor dc motor speed applie voltage armature ..motor generator ;motor drivs Ia arma3 current Ia .v.t fiels curre2 if decrease motor Ia..
Explanationlow of 4 list smooth speed control over ..the speed regenerative ..usinf over excitation synxhroneb draw back leonard
Dc serie motor working 3 characteristic curent vs armature current speee vs torque ..Tax flux .Ia ..equation Eb=p.flux.n.z/60 ..equation toraue flux armature current T=if x Ia ..
Advantage serie vast staring torque easy assembly .protection easy ..
- peak value ac current and make labelled positive negative sine wave alterations..
Vp-p=2×vp...vp=ac.....vp- 2 vp positive vp - p = 2 × vp , vp-p=2×170v=340..vag
Power factor Q=E÷Q,C=1÷2pi×f×c..
ZtotL =zcc//(zL-IR)...; I.I×Z
Transfo
Zt=Rx.jx.l÷R+jx.l ; I.Z=P.Z÷V.z
Rs=V+(max).v2÷I.Z(max)..

e1=Em.sin.wt ; e2=k2.Em.sin2wt...;e3=k3.em.sin3w.t

- industrial eectronics
Test trade

1-losses÷input; 1-I1.R1+W÷V1.I1.cos

Wiring design:load field serie parallele
Developingcircuit serie parrallele start delta connection ..
R×.I×.I=3×.R.×I.×I..; I=j.; I=j..3
.R÷3.×I.×I
E=1/R1+1/R2×j×t start .
.delta I = j ..R.×j×j×t..
I = j; =j.sq root 3.
P=R.(j.×sqr.3 or 1.73
E=3×R×j×j×t
E=3×(1/R1+1/R2)×j×j×t
E=3×(Rq+Rw)×j×j×t...

Xl/3; XC..
ZT=1/Z1+1/Z2+1/Z3
ZT=Z1+Z2+Z3
Gt =G1+G2+G3
..E1=1/Z1+1/Z2+1/Z3×(J×t)
E=3.(z1+z2+z3)×(j×t)
E2=1/z2.1+1/z2.2+1/z2.3×(j×t)
E3=1/z3.1+1/z3.2+1/z3.3
ET=E1+E2+E3..
ET = [1/z1+1/z21/3.(j.t)]×[1/Z2.1+1/z2.2+1/z2.3×(j×t]+[1z3.1+1/z3.1+1/z3.2+1/z3.3(j×t)]

Et serie = [z1+z2+z3(j×t)]+[z2.1+z2.2+z3.3 (j×t)]+[z1.1+z2+z3.3(j×t)

ET=[1/z1+1/z2+1/z3(j.j×t)]+[1z2.1+1/z2.2+1/3.2(j.j×t)]+[1/z.3+1/z3.2+1/z3.3.(j.j×t).

[Z1+Z2+Z3(j.j×t)]+[Z2.1+1z2.2+z2.3(.j.j×t)]+[z3.1+z3.2+z3.3((j.j.t)]

Conductance ..impedance .suspectance load ..networks

On Mon, 25 Mar 2024, 21:29 tshingombe fiston, wrote:

Purposes: saqa qualification n diploma
---
engineering code trade component and
N diploma log n6.n diploma level theoretically basework skill and practical basework pratical ..component trade manufacture explanation low based outcom low based .
"(Plc code trade manufacture design; ;renewables solar.hydro electrical plant power .; ligthing system incadescence compact halogen..electronic component .appliance domestic washing machine .dc machine motor generator ..ac synchronousebmeasure instrument"
□□□□□□□□□■□□□□□□□□□□□□□
□□□□□□□□□■■■□□□□□□□□□□□□
□□□□□□□□□□○○
-undertaking material streigth test material rop .("$")
package inspection. Check material design ("$")
material
-laballing sabs code pratical wirie size
marking off CODE CABLE PLASTIC POLYSTERE ..CODE MANUFACTURE
("$")
w.gauge eic
-soldering ensemby ddiensemby component step ..
-interprete drawing circuit scaling ("$")
- electrical wiring panel interpre("$") ..controll programme ("$)
-prephase select trade pratical theory
Trade test preparatory functionning marks process
□□□□□□□□□■■□□□□□□□□□□□¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤
●●●●●●●●●●●●●●●●●●●●●●●●●●●

-Phase final qualificatiom 1th2th..3th..4th
□□□□□□□□□□□□□■■□□□□□□□□
■■■■■■■■■■■■■□□□□□□□□□
SCOTISH EVODENCE LOW

On Mon, 25 Mar 2024, 21:05 tshingombe fiston, wrote:

Purpose :
-Explantion :module peogrammable logic controller explanations wath a pkc is function a programme logic controller device component use languages for commande for industrial automatic industrial .outcome:
-statements .the component of a plc . Used switch input output device . Relay controlled transistor thyristor ,diode
-unity upc central computer .
-display monitor control interface .

-explanation what a plc is used :
outcom ;for is use for compare information and compulate suply information relat contactor informer conductor for suply power
- Language used to peogramme plc used fortain q basuc visual ..
Input outpur ..
Outcom is programe switch control input .output device read information circuit ..off and on relay control contactor switch transistor thyristor current programme.
- ligthting systems .explain with the aid of drawings the operation of the following.
-outcome incadescent lamps : socket incadescent bulb is contracting by glass circular and close culot switch culot switch and cement and wire resistance high resistivity tungstens and powr of hg gaz input in side is operate by ohn current flow the wire in side enclose joule effect give colour and hg gaz electromagnetic of charge disxhage energy..
..I=u÷r..E=R.I..
-compact fluorence lamps : is working by glass tube cathodic have to side switch contact ..and side gaz of fluor chemical in side have a coil stander Nd condensator filter resonance for correct power factor in parallele with pole cathosic operationel when pples contact current flow cylinder bulb is react chemical hg fluore beam ..electrons acceleration..give effect .

-halogen lamps : is construction or aorking by labeled and polyster and mercure ag pres5 gaz chemical by fire give explosion..
- metal halide lamps .is same lMpe fluorescent or the same white compact fluorence wire heat
-..neon lamp icadescense .high intensity discharfe
- reneeeable energy : solar energy statements the advantage is no cost and working working current not dischage the cell .explain solar energy is conerted into electricL by plaque semie conduxtoe photo emissions photonconduction P.N doppinf react and conduct electromotive force bonding covalent..
-explain how: direct current os converted into alternating is converted by follkw step energie solaire periodic floa movement bond p.b junction continue dc current and step dc to ac follow thyristor gate control off on active

On Mon, 25 Mar 2024, 18:53 tshingombe fiston, wrote:

Purpose:
-Explanation low .speed control of motors : mean outcome normal speed above normal speer increase back emf fall resistor resistor has been cut and the motor normaly .
- explanation low how shunt swries motor can be mode to run at three speeds fields coils of a series connected armature carry current no load and full load speedly load torque load..
- explanation dc machine testing name test to be performed on dc machine in order to assess its condition dc methode rope brake test couple sainburg method ..outcomes ; T=(W-S)×r..
Efficiency =V×I÷V×I+I"a×Ra+I.
-Explain each of the test mentioned in above .air cooled .pulwy belt ropes scale , mass reading ,indirect given in above ..
- Emf .equation of generator.
Drawing the characteristic curvers of generator clearly showings the following..terminal full load ..I .
Outcom - open circhit terminal volyage agains field current .
- calculate the magnitude of the generated .e.mf accross the armature ..emf =V+IR..
Outcom cLcule the magnitude of neee for compound - wound generatoes ..
-efficiency testing of dc machine all constant and variables losses that occur in dc machines ...efficiency =ourpur power ÷input power ×100..
Outcome : armature loss = I"a×Ra..watt
Windage loss iron loss in the core bearing friction loss commutator ..
- explanation: why the iron part of dc machines are laminated for direct man.
Name all constant and variables losses that occur in dc machine ..
- iron part machine are lamited .outcom reduce losses magnetostriction
- caxulate the efficiency of dc machines using method ..outcomes directmethod methode summation losses ..regenerative methode back to back trsr ..V.I-(Ia.Ra+Is.v+C)÷V.I ×100; 2pi.nt/60..
=2pi.n(w-s)×r÷60 ; input =V.I..
=V.I÷V.I+Ia.Ra+I3.V.Ia ×100
-starting of thre phase induction mktor ..explain slip with regard to three phase induction motors similar to that of a three phase rorque maner order..
-Explanation calxulate following slip : synchronous speed actual speed .. outcome .s=N-nr÷N.. .s per unit slip .N = synchronization speed of fiels revolution minimum ..nr = actual speed of the rotor ..explanations with aid of circuit diagram how three phase induction motor are started using .the following methode outcom direct on line starring ..reduced voltage starting .motor resistance starting ..small motor torque of fan is proportional to the square ..Vph=VL÷3
- synchronkuse alternator compare the construction of a synchronous alternator with synchronous motor ..
- explanation with aid of circuit diagram how two single phase alternator are synxhronised a common busbar system .- synchronous motor low .outcome a synchronous motors is wound magnetic field stator and rotor coul is in the same level speee fiels nr is equal to na actial .slip rotatinf flux slip percentage ..
-explanations how this motor can uaed to improves the overalk power factor of a plant in the case of shunt motoe the movement the armature short circuit outcome; no - volt coik and it energise in the case of a serie motor switch ofu exceed predetermie.
- explanation transformer: cooling of transformer ..explain the need for cooling of transformer losses air coolinf small transformateur ..oil cooling ..tfo ib oil tank minerak ..
- explanatort need for cooling of transformer ans : losses in transformation ..
-Explanation the differences methode used to cool a transformer methode aur coil is use

small transformation..
Oil tabk the heat is transferred the windinf oil conductive
- N1.N2..I1÷I2..V1..V2.....m..
- protection of transformers explain moisture form overloads short circuit .lossses in a transformer .distinguish losses transformer self induction using transfo ..auto trabsfo ..for step using cooling of transfo earthing transfo discobbectiob hr..
- explanation earthing system ; outcome : equipment power statuob .shield conductor diagran IT network .TTN work ..
- explanation: w supply neutral conductor suppliers consuctor must determination consequencesof protection earth poinr tank supporr structure earth continuiry conductor...
- explanation power management: outcome; domestic and industrial consumer billing system energy charge of domestic consumer the two porr tarrif that large consumer are charged prepaid metering system
- maximum demand time swirch time time of use ripple relay radio conyrok tarrif mcb consumer demand ..I×cos..
-renewablw enwrgy salon energy state advantage solarw dc converted ,ups ..uniterrupted power supplie..
Explanation programmable logic controller plx ..comment used language is plc

On Mon, 25 Mar 2024, 17:33 tshingombe fiston, wrote:

Purose :learner examination completed
Applies skill electrical trade theory , electrotechnology ; electrotechnic ,control logic .logic system to resolve engineering electrical .science engineering outcom design analyse qualification framework low exhibitions value examination evidence
- appliance explain wath is an appliance the two classe of appliances three cateforie of appluance ; evidence outcom fixed appliance tools portable appliances stationnairy appliance .cooking appliance ..
-explanarion low assessments : the basic principle of operarion of an induction .cooker operation of the following.
- three theat stove switch .cooking appliance include built stoves oven hobs an like
-simmerstat switches
-rhrouht fixe winning isolate earth stove 16A rating ,socket 0,5m. 2,2mm.
- oven thermostat switch ..
-explanation evidence low .the principle of operation the following type of space heaters.;of space ; outcome heater ,convection heater ,infared heater,radiant heater,ceramic fan force heater ,micathermic panel.
-smerstar energy regulator tje bending of alimentaire strip which opens and close a set of contact a heating element whic supplie heat..
_water heater : explanation the principle of operation of the following types of water heater , tank less water tank less water .heat pump water heater solar power heater condensinf water heater condensing water .explain with of drawing .
-washing machine type available. Explanation. The principle of operation of the following washing machine outcome low semie automatic fully automatic.. low speed meduim speed high speed
-explanation of type of ligthing : 3 type basic of ligthing ; outcome ambient ligthing general ligthing .task ligthing accent ligthning..lamp incadescence lambe mercure vapour .
-explanation emf equation of motor dc ..outcom calculation magnitude of the back emf induced in tge armature..

_explanation and design drawing the characteristc curvers of motor ..outcom flux

agains field current ;speed against armature current ; torque against armaturw current ;calculate the torque exerted by the armature of dc motor.
- explanation: non sinusoidal waves dc determine the form factor of non sinusoidal wave.voltage .max min time
- single-phase circuit component have on the current in ac circuit :outcom resistor ,inductor;capacitor.
-explanation different betwen algebraic and vector facto quantity .outcom fresnel diagram v.i ..E=V+I.R..
-explainatiinnthe conceptual impedance and alsi calculate the impedance and a calculate the impedance of the following loads . Square root / Z"=R"+(XL"-XC")
-resistance Z=R,
-inductor Z"=R"+XL"
-Capacitor Z"=R"+XC"
-explanation draw waveformand vector phasir diagrams for followingcircuit.. restance vector I_____ V...
Inductive |_____>

-explanation resonance and effect in serie outcom X L=2×.f×.l ×pi
Outcom low statement and determinent effects power poor factor and show by means of simple diagrams how ican correct outcom P=V×.I.×cos ...Q=V.I.sin..
_____|-----
- explanation.three phase balanced load : IL4=IL2-IL3 ..ip .×cos.×30"
Outcom statement the advantage of three phase system over single phase system .three supply is more versatile machine deliver high sam size..
-explanation drawing the wave forms and vector diagrams the voltage distribution..
- three phase system : statements the relationships between phase balanced load type of load : P=(Vp×Ip×cos@)+(vp2×.Ipe×.cos@+Vp3.×ip3.×cos@)
V=3×.VL×.IL.×cos@×n
-explaining low three phase unalanced ..explain difference between.and unbalanced load
- balanced system three pine current are equal having start neutral zero current diffente IL1+IL2+IL3=IT
- draw vector diagram of three phase ubalanced load is calculated .

On Mon, 25 Mar 2024, 16:30 tshingombe fiston, wrote:

5.Purpose: entry criteria minimums. Trade qualification occupation test trade Industrial orientations.
-5.1.knowledge:recall and understand application industrial orientations:design analyse investigate engineering studie learning base vocationel means evaluation :didactic module focuse question and answering:
-Standard in trade .industrial council
-development service close cooporation compagny educationel
_supervisor function control task subordination teach workness
-unsafe working iso 1900 financement new project business venture .
-purpose independent capital business conduct unsafe condition.
- planing work advantage policy training. Meetings new employee control exercise main power .
5.2. Knowledge recall and understand .applications. plant operation : Chemistry : and chemical process good examp cellulose wood rubber .C.H8.
-organix solve acetan catalyse react .original main purpose.
-react gaz N(0g)+O2(g)=NO2(g),
NO2(g)+Co(g)+Co(g)=(Co2g)
C+O2=Co2..70% combustion, H2..H2+1/2.02=H2O

Convection radiation conduction compression mettall hydrogen oxygen present steam boilem ..
hsu=hf+(xhfg)_[(tsu_ts)]
5.3 knowledge recall understand application electrotechnology:
Dc machine protection : poles shoes , shifting 4 factor average vLue .sin define ..tree singles transformer , decimal number necessaire step serie motor application.

5.4 knowledge : recall and understand , application electrical trade theory ..appliance electrique washing machine domestic appluance type machine maintenamce installation..illumination , ac , dc current machine transformer instrument measure material
-Exam trimester learner 2 formal class module 100 mark duration minimu pass mark promotion mark 40 +60.assessment.

On Sun, 24 Mar 2024, 21:06 tshingombe fiston, wrote:

Purpose: re -agreement distance university years occupation semmester pass examination college university degree research topics skill development university rsa -qualification equivalente
---

|Id saqa :96856 |NQFlev6| 3 years | of experience:

|technical tvet | university |
|college subject |exempted subject

-communication n3, |communication
|N4,n5,n6 ,nqf7. | skill:1,2,3, |
English business
Orientation industri
Supervision manag
Communic at skill adm|

_____
-computer n3
| N4,n5,n6,nqf7 |computer skill |
1,2,3,

Info manag syst | introduct ims
Information manag |
Info process
It

_____

-mathematic n3 | mathematics 1,2,3|
|N4,N5,N6.nqf7

_____
Industrial electronics | electronics 1,2,3
N3,n4,n5,n6 nqf7 |

Electrical trade theory| power elect1,2,3
Electrotechnology | machine elect

Electrotechnic |
Control logic |control electri1,2,3
Logic syst
Digital electronics |
Radio television
Radar missile

---

engineering science| chemical 1,2,3
N3,n4,n5,n6 | physics 1,2,3

Plant operation |
Power machine |
Science buildings |
Carpentery |
Wood work |
Bricline |
Civil
Diesel
Mechanotechnical
Turning fitting

On Sun, 24 Mar 2024, 09:29 tshingombe fiston, wrote:

Theoretical framework base Experimental
experience outcome: engineering electrical
Fundamental basic electrical trade
_construction trade
Opwrationel trade low rules applied trade skill to resolve trade skill or science engineering.
-applie sabs code of pratice wiring premise .trade
Construction component structural theoreticak ..operation safety trade tools safet i rules narse plat machine building ..sign fire smoke ;injuries fire hazard cut space save damage of good is prevented.
- cell advantagr distange of component .construction single high efficiency at full load silent oper2.
- transfo little core and maintenance .open aire cooling coding transformer assumef..secondairy cell advantage great capaci2 thsn primary cell deally emergency application life ..disavatage more than primary cell regular maintenance period traditionallt less suited for ..code collour sketch eic .carbon resistor potention variable capacitor zener diode p p transistor battery cells .polarization carbon extrinsic ionic bond..
-Dc machine theoretical applie .component yoke poles shoes bushes back wand motor moving brushes in generation poles field series .number of pairs of used .strength magnetic field .radte magnetic flux cut the moving conductor number field.
-generator ward leanard motor generator system .shunt generator used where constant voltage is require.
Series generatir a booster on dc line transmission line ..
Flux armature ..
-trade applie skill to resolve skill : domestic aappliance ..washing machine imersion water heater protection steel conduct pipe earth

-ac machines measuring instrument electronic.
Material used in the manufacture of semie conductor
- special characteristics: special arc funace transformer power require..
- control system like componentation electrical network allowed for process to monitorred regulated environ control system or overall electrical.
Static control .analogie conversion .
-electrotechnic principal. Nuclease positive low directly proportional type algebraic sum emf principal change in flux linking with circuit .
- movement of conductor in a magnetic field .increasw decrease curent circuit .carbon brushed .graphite copper graphite.efficiency load 97.moving silence magnetic circuit winding tank protec3 refrigerator.
- connecting electrical .machine pratical tips for connecting.
- make sure rigth joint .check size of lags .make sure crimping tools that .fit .
Purose of joint :installation core inslection of equipment locating of the rigth tools for jobs .
Make sure tha yo know tools box organised store tour tools safe
Fundamental low skill formuler :
Explanation caculuation valut size ..coulom.newron joule ..theorem
- engin2 drawing .welding pc drauting joint meyal ..screwthred arc welding resistance lab joint corner join butt join sc first angle orthographic projection coupling projection machining

On Sat, 23 Mar 2024, 17:19 tshingombe fiston, wrote:

2.purpose : criteria entry trade

_____
theoretical and pratical examination n diploma subject .occupation council trade and qualification trade engineering studie field
Subject : electrotechnologie ,trade theory electrical , orientation industrial, plant operationel ..industriel electronics .engineering science .engineering drawing..electrotechnical .drawing engineering
Trade
-Outcome subject : trade orientation and industrial sector growth in developing countries sadc .
-industry orientation exporting and productivity manufacture way engineering electrical system
-econometric methodologie : trade requirements operationel task step

-estimation : depended variable is log labour productivity skill development chieta merseta training authoritu saqa
X freq :
-Acknowledged: scaling module task subject trade industriel requirements logic methodic ..energetical supplie saling buying commissioner. Metering installation building db box lab workshop electrotechnologie undertaking material redesign.
-classification of manufacturing:
Model industrie sector primary mining mineral electrical engineering secondairy industriel production component .and industriel production energy or municipalitu revenue commissioner customer: according sabs. Act hortoring eic..coding industriel trading .
- labour intensive industrie: industrial vulcanisation .
-manufacture :joule
-labour intensive industrie: industrie scale manufacture
-specialised supplie industrie : compagny trading .
Solar panel manufacturing ;transformer manufacturing ;business ; cctv camera

manufacturing unity .television .display device :robotics mechatronics industriel
-single double door refrigeration industrie washing machine repair ;phase AC motor panel industrial;water puri2 repaire
-introduct to electruc trade job opportunity: safety precaution and typist .tools equipment
-how 2 way switch electrical board work wath stones bridge key:
- industry orientation:training job market emplyment are looking candidat industriel tools team build assessment. Understanding market orientations and how it works wath is market orientations custome market orientation vs other strategies real work market pratical trading essential trader interactive broker trading
-| |star ratinf |min dep|stock trade|perc||

Load min
-amen trase
Interact
Tasty trade

3.Purpose: pratical trade national frameworks qualification
Relate theoretical framework based vocationel
-requirement:
3.1tools instrumental
- trainee tool kit no 1
_scribe 100mm; hacsaw frame withblade 300mm ..no : 2
-Hsc drill bit 6 mm .3 mm
- round nose plier 150 m. Grimping tools ..- instrument equipment
3.2Digital multimeter ; megger 500v -.contactor 4 poles ;16A;240V;2 no ; timer
3.3 material :
-Push button green /red..
-indicator lamp with holder
- overload relay 0-15A;415v
-race ways 2-mwter .
-1,5 sqm copper cable as to 650V
- terminal connectoe 0 .
_ wirie ferule ,connector ;cable blinding shapes; shaps button ,nylon cable assort size
_____
_design
|Logic input| output logic pin no|
A/|B |3 |6 |8 |11 |

|0 | 0 |gate 1|2|3|4
Condition gate ic
_____resistor design
Serie numbe|sketch ref|type of | symbo
□□□□□□□□□□□■■■■■■■■■■■■●
●¤¤¤¤

-Pcb track design:
□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□

-Construct power control circuit scr:
PREPARE

-Halfwave: 240v,50 ; 24v..vdc
□□□|■■■[
-Ac supply 415..dc control supplt .driver .dc motor ,dc generator 200v load ..200w
Serie number |load|armature voltage

Load volt |current motor speed in rpm

□□□□□□□□□□□□□□□□□□
SW1 S 3u v w
240v
□□□□□□□□□□□□□□□□□□7

Wiring diagram of dc driver
The panel board used fix panel meter and indicator front
1.identify and selec prepare range

_make size |rate main | rate power kw
Switch mcb ,4n ,500w,

On Sat, 23 Mar 2024, 09:40 tshingombe fiston, wrote:

Application :
Ref: letter number :2024/0322
-Saqa id ref:201911130002
- Saq enquiry: 9370;
-Dhet: 2100002023812;
2004007064381

_____
Enquiry No:.

-Name of institution: st peace college
-Date of application:01/03/2024

-Date of start :19/10/2019
-1.qualification: title engineering national diploma .award ..rd congo
Assessor moderator
Subject electrotechnology.
-2.qualification title :title engineering n diploma.
Student electrical engineering
_3 qualification title : skill trade panel waring i
Chieta ..C0700410101099 pratica seta electrical .
_ start qualification award institution
Saqa work day 15 . Graduate criteria decission 15 day evaluation on pre work..registration
Policy Ie099

_____
Qual |qualification |level|nqf| min | repla

Id | title | | cred|

_____
20420|national cert | lev 4 |120 |
| electrical eng|

_____
20418|national cert | lev2 |120|
| electrical eng
_____48475|national cert |lev 6 |120|
|electrical eng|

_____
80160|national diplom| lev |360| I,II,III
| electrical eng |

_____
90674 nationa n diplomat studie eng
Nqf level 6
67043 | n diplomat | purpose
_____Id 67491| |
N3 to ;n1n2 ..subject pass
Electrotechnology. Orientation industrial
_____N4 |electrical engineering irregularities subject recertification in progress marking quality councils insurence body dhet electrical trade theory ..n3

_____transcript record NLRD: saqa national record databse :
Saqa ID 66881 transcript bachelor
_____

15 days work topics
in nated pratical theoretical framework: .award saqa

_____
Ref:, Dhet: topic career subject
-businesses english : topic cvs. cover letter compagny
-orientation industrial :
-supervision: planing
management supervisor
Hr communication .

Assessment lms :Learning dhet .completed form underpine poa poes learner:toic pratical coverage textbook explanation last papper
vs compagny trade challege viste trade practical irregularity subject
Material irregularity for pratical class room space rental location accommodate space ..theoretical compagny trade
-city power eskom vs trade seta psira ref city power work metering generetor transmitter ligthing can not support practical visited vs dtic industrial manufacture mining illegal manufacture component vs topics challenge class rental insurence workplace

_1Purpose: operate electrical .wiring and control wiring and control switch
Explanation topics research n1.2.35.6 final research topics ..
Award police cat meeting requirements
Submittal online proposal

On Tue, 27 Feb 2024, 09:59 tshingombe fiston, wrote:

Application

Ref: Applications letter number: 2023/1226

_____

ADRESS: PRIVATE BAG X 174, PRETORIA 0001

123 FRANCIS BAARD STREET PRETORIA

TEL: 0123235618

_____

ENQUIRY NUMBER:

DHET:

DOCKET NUMBER: 2023/1226

INFORMATION MANAGEMENT SYSTEM

- INSTITUT COLLEGE NAME: ST PEACE COLLEGE

-ID: NUMBER: TIRC0G000910610

-REGISTRATION NUMBER: STUDENT -CO70040101099

-SARS VAT NUMBER: 923228238

-MERSETA: 17_QA/ACC/1311/17

-SAQA REGISTRAR STUDENT NUMBER: 210020223812, 2004007064382.

-email address: tshingombekb@gmail.com

-Alternate email address: tshingombefiston@gmail.com

APPEAL DECISSION RESULT RELEASE:

APPLICATION NUMBER:

Saga: institute foreign .saga transcription meeting 71638 dry Congo requirements graduate award diploma knife .high certificate no meeting .leave school .expended assessments .exam d teat diploma .certificate professional .certificate informatics mathematic vs. offices ; result outcome primary status registration saga asset 09121 .saqa institute 30_ 39 no assess policy.IE099 ,saqa id 67q0 certificate advance phase teach .n1 saqa id 63375.id 67491 entrance

.n diplomat

-Qualification title national N diplomat engineering.

-nqf level:6 .

-date submitted to dhet :1105/2023

-date process.

DHET

-Timetable /50111002

-N1: engineering studies

-ID: 2004007064381

-ID: 2100002023812

Dear .mar minister of education duet and deputy member of duet .vet college examination directorate and authority competencies. Government’s president

I' mar tshingombe tshitadi ;acknowledge student st peace college candidate examination career student follow course in duty of nated in rsa 2019 to 2024 , i 'm

appear to your department goverment institution for allegation view no result of statement id candidat engineering n1.,n2, n,3,n4 ,n3 and n diplomat saqa outcom in irregularity final n5.n6 /nqf 6.

Examination national examination was not delivery in the time external assessments commited irregularities.

1.my motivation and disciplinary assessment submitted my portfolio on line portal duet release resultant statement and finalized award diplomat by examination committed irregularity November invalided subject n3 trade theory electricakbtranscript the result of assessment was note release reason irregularity n3.subject n4 .subject fail druip result February 2022 .directorate assessment transcript material .statement affidavit submitted sty peace college registrar shalom technical and agric institute college no result outcome .after 15 days was result scaling n1.n2.n3but statement didn’t come out not print out by registrations resentment inconvenient. Arbitrary irregularity on February I submitted topics saga cot dhet email result of saqa documentation; filing dbe dhet .the committed was under investigation soon to finalize.

2. I received to duet committed assessment examinations irregularities the retain

, invalided subject 23 February 2022 the time table of n3 subject administration exam with those subject trade. electrical trade theory .4 subject November 2023 examination rhea result statement for last examination was not print outcome n1.n2 submitted n3 last time table exam only last n4 exam statement print outcome and not time table for n6.,n5 received in examinations November suspension is 11 month for irregularity .follow vet guideline assessment. Exam over the date insurance body frameworks qualification and labor department if could claim no outcome in career portal was outcome granted national fund skill for extra subject topics irregularity written cot practical was not granted scope portal research cot .

3.allegation result statement retain duet .;saga n diploma n diplomat application for n4.6 diplomat final was no granted n4.level 4 diploma ices years college in my portfolio submitted on line marked exam n5.n6.subject additional assessment information by institution is at ices.

Ref outcome saga result

16 Jan 2023 on line maraschino massage send submission number foreign institute inquiries 9370.

Foreign institutions inquiries 6594

Section 29(a) policy criteria saga knife amended march 2017 institute ...framework nqf foreign award must meet for recognize.

Saqa accepted only qualifications official examination body country...external examination based, 26 July 2022.

4. Allegation to qcto retain on; saturday22 January 2022. ; With regard n certificate direction dhet education training (for n4_n6 n diploma or umlauts n3 can not assist with

qcto issued

Sat ..10 march 203 l .certificate@qcto.org.za answer soc please note that the qcto does not issue any of results

-lindiwe grace 28 may 2023 inquire to national and assessment college .i have copied our QA unit they will be able to rspond to accorlingly regardc

Qcto khuluvhe labour market intelligences lmi esteemed stakeholder 21 aug 2023 was not grante

- i receiving Allegation to saqa retain on.10 march 2023 procedure for evaluatiin pro forma invoice .copy id passport.copy final award graduation certificate. Copy of completed transcript mark sheet academic record.proof payment if not meetings requirements can resubmitted again.non compliant; 27 july 2021 application above doe s not meet saqa

Final award school diploma degre certificate in 48h .

-that my requested letter to the authority minister for my result statement certificat over the date review n diploma 24 month.18 month nated examination to resolve problem after examination irregularities materiel that final result n4 and new re certificate body insurence investigation result center assessment outcome years icass total tvet for my institute st peace college institu and externsl certificate n1.n3 afric training institute and shalom technical collection print out was not in my application for diploma response from dhet submitted to resolve conflic assessment examination.

- Your sincerely.

Sign :Tshingombe Tshitadi

_____

An.n3 .in the relevant specialization area communication nqf level 4 in language teaching ...theoretical knowl2 and practical skills required and learning of institution offering. To be award the award qualification learners are to choose complete .business studies 0.5 years business studies.

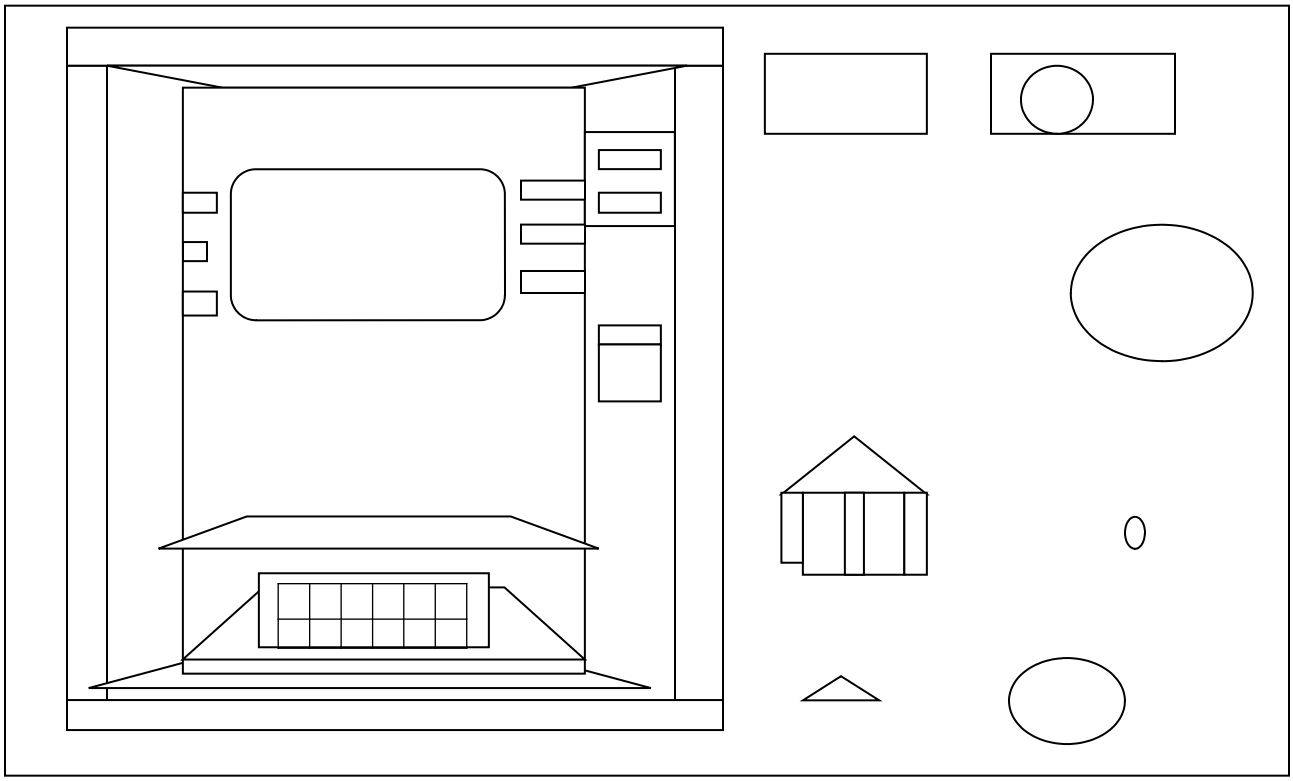
.N4 o.5 year’s duration 60 cresits ...n5 (0.5 year duration) 60 credit .n6. 0.5 y

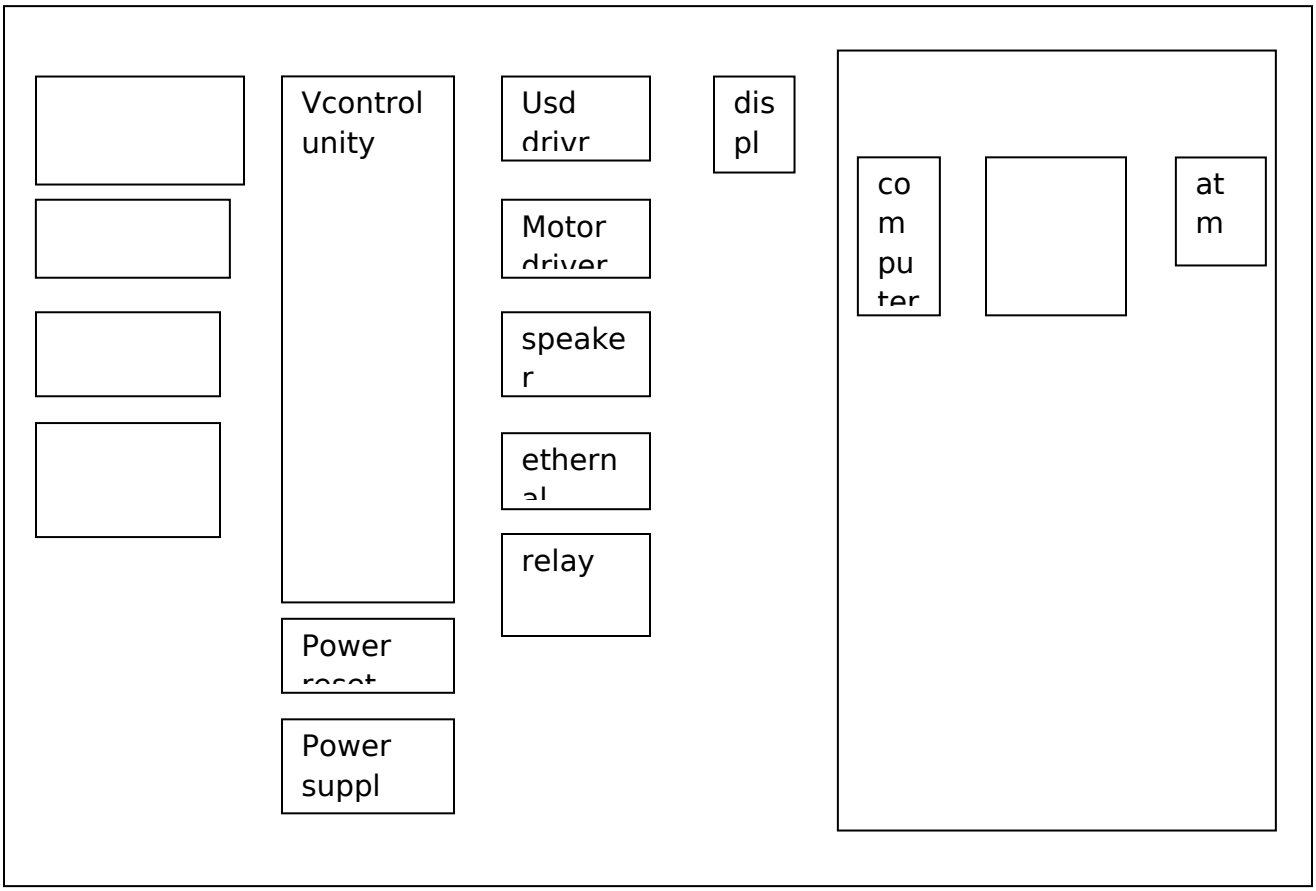
E-mail Disclaimer: This email and any attachments thereto may contain confidential and proprietary information and is intended for the recipient only. If you are not the intended recipient, kindly delete the entire communication and notify the sender thereof immediately as the information contained in this communication may be privileged. You are further reminded that copying, distribution or disclosure of the contents of this email may be unlawful and result in legal action against you, in the case of you not being the intended recipient. Whilst all reasonable steps are taken to ensure the accuracy and integrity of information transmitted electronically, information sent by

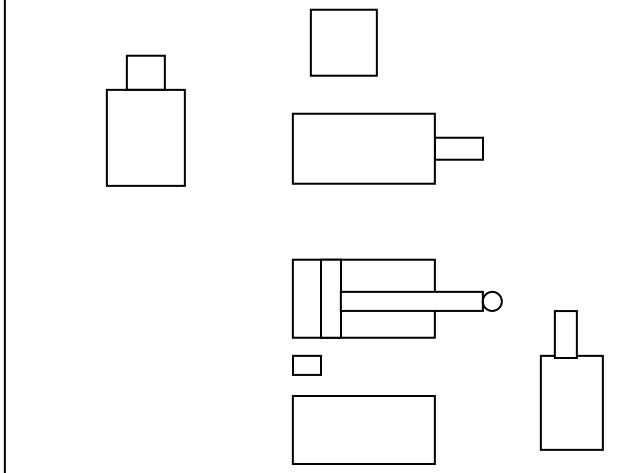
email is corruptible. SAQA does not accept responsibility for such corruption, destruction, damage, infection, loss or interference of whatsoever kind and howsoever caused that may be suffered as a result of receiving this email.

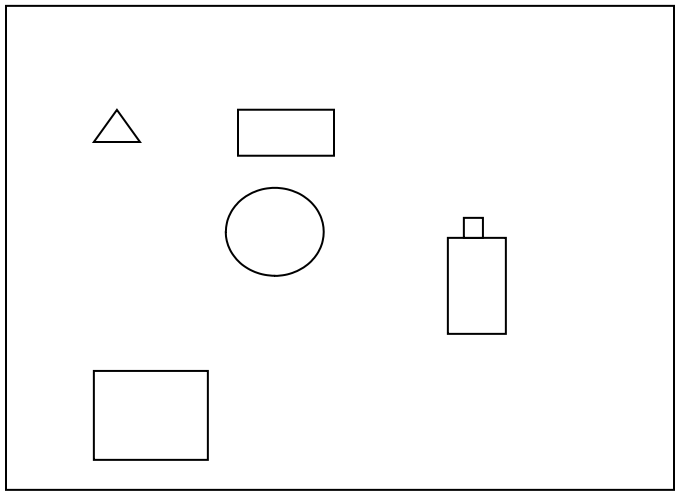
Date: April 17, 2024
Time: 12:11 pm
Page URL: https://www.saqa.org.za/status-of-foreign-institutions/
User Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:124.0) Gecko/20100101 Firefox/124.0
Remote IP: 196.250.230.238

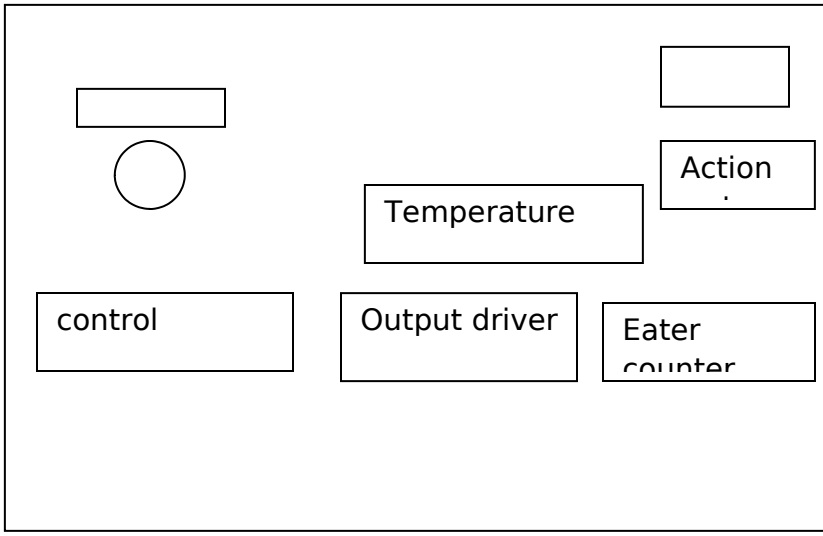
E-mail Disclaimer: This email and any attachments thereto may contain confidential and proprietary information and is intended for the recipient only. If you are not the intended recipient, kindly delete the entire communication and notify the sender thereof immediately as the information contained in this communication may be privileged. You are further reminded that copying, distribution or disclosure of the contents of this email may be unlawful and result in legal action against you, in the case of you not being the intended recipient. Whilst all reasonable steps are taken to ensure the accuracy and integrity of information transmitted electronically, information sent by email is corruptible. SAQA does not accept responsibility for such corruption, destruction, damage, infection, loss or interference of whatsoever kind and howsoever caused that may be suffered as a result of receiving this email.

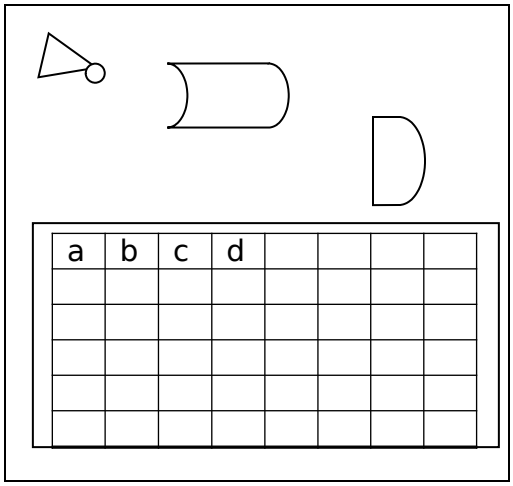


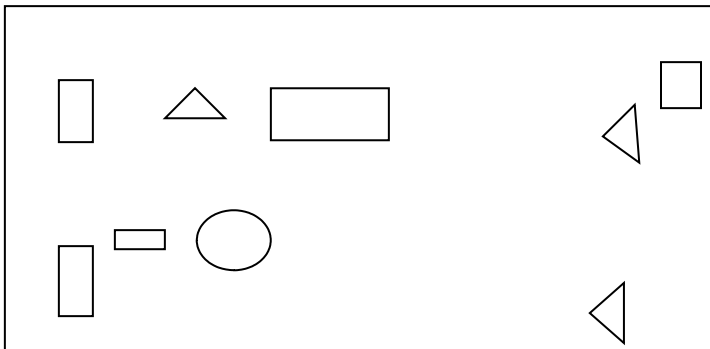

Vcontrol unity
Usd drivr
dis pl
Motor driver
speake r
ethern al
relay
Power reset
Power suppl
co m pu ter
at m

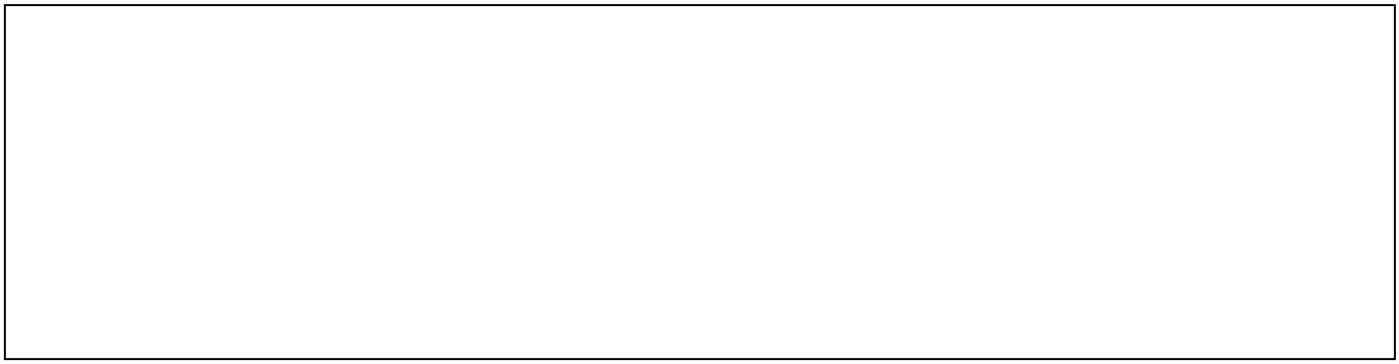


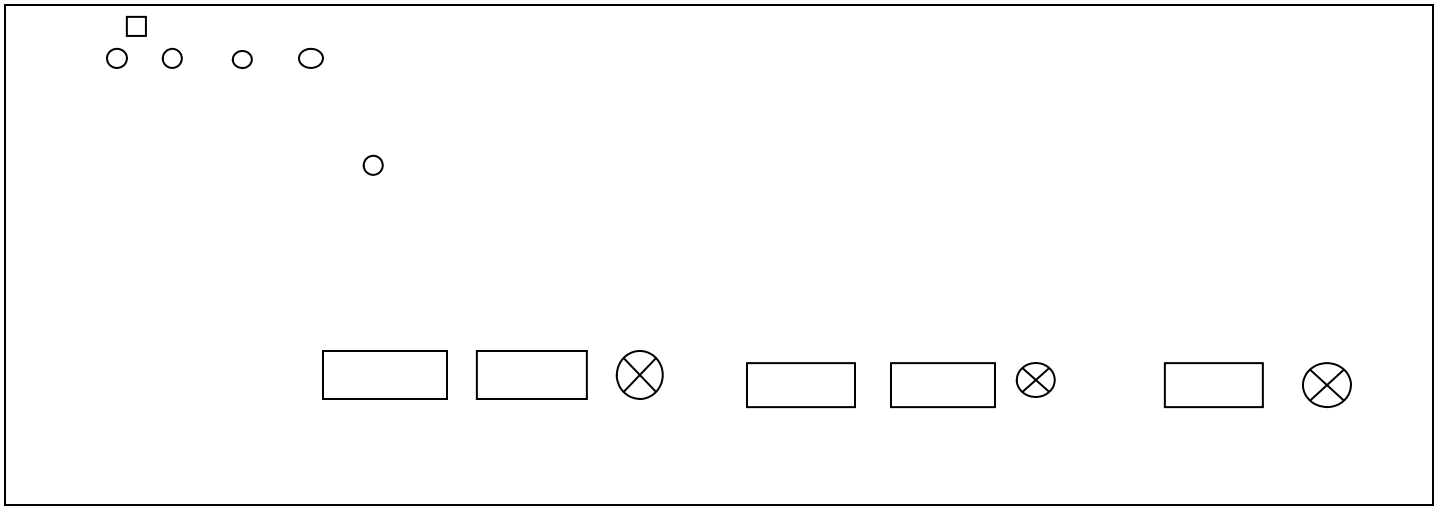


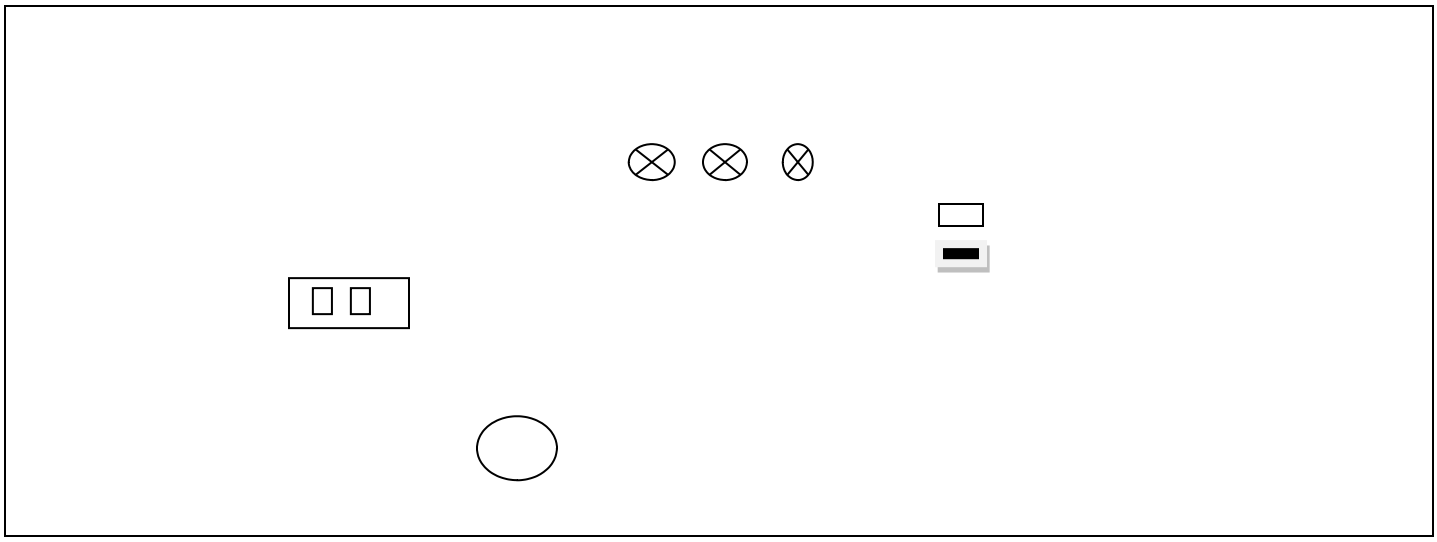

Action
Temperature
control
Output driver
Eater
counter

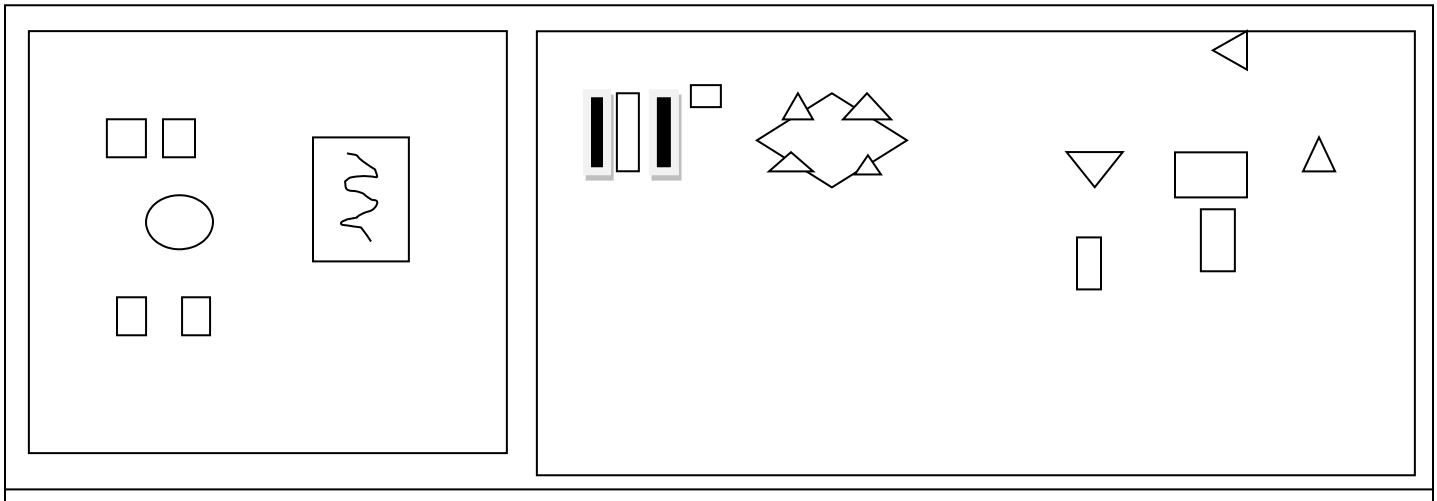

a
b
c
d





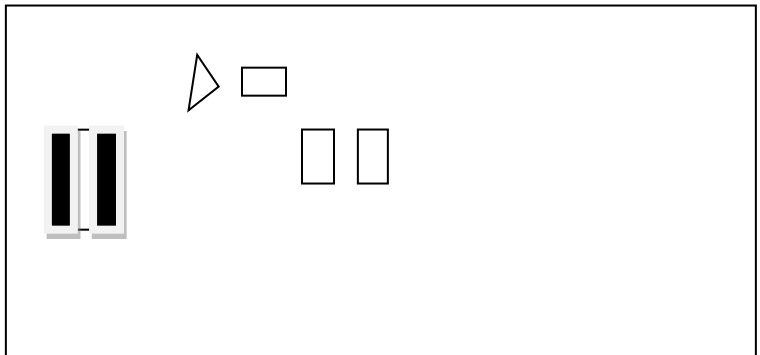


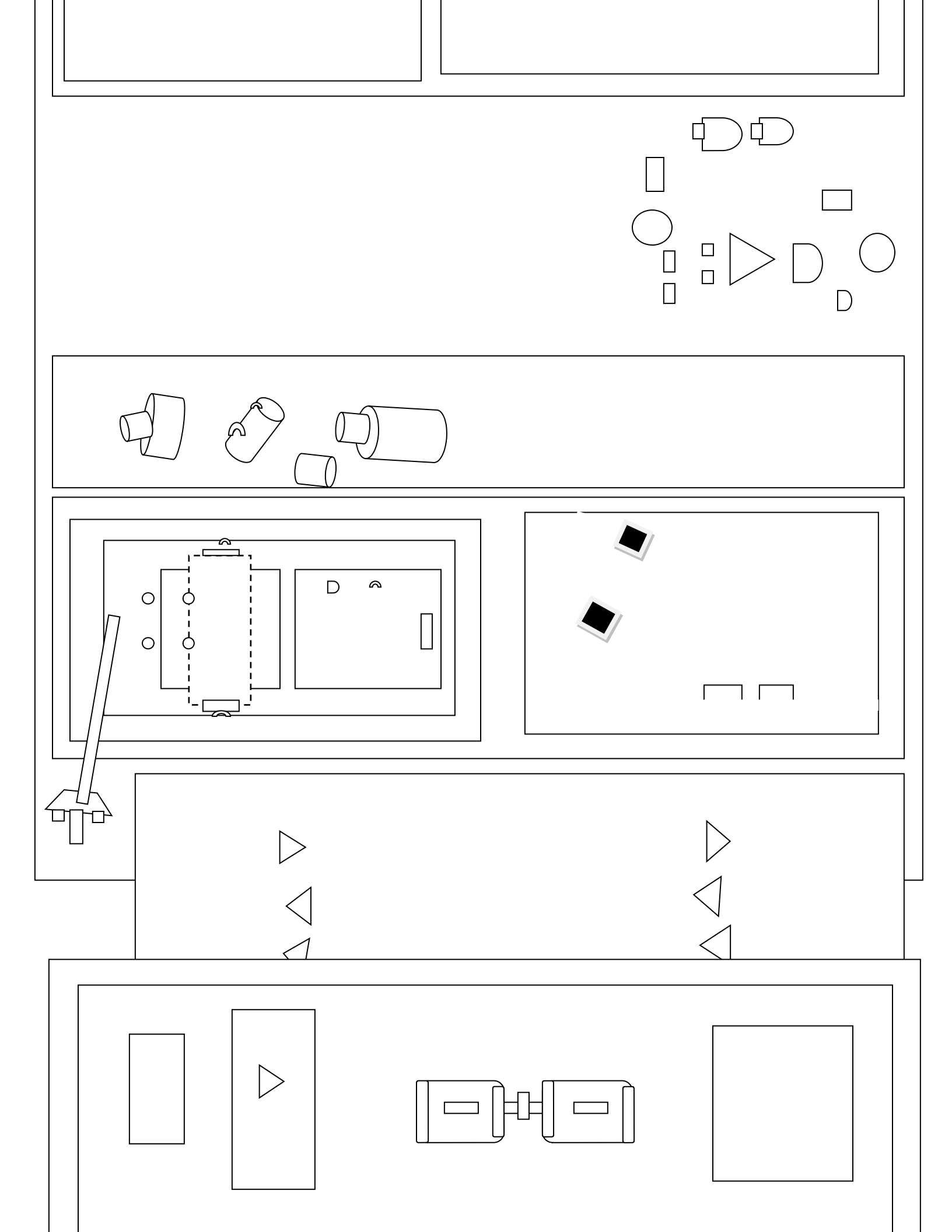


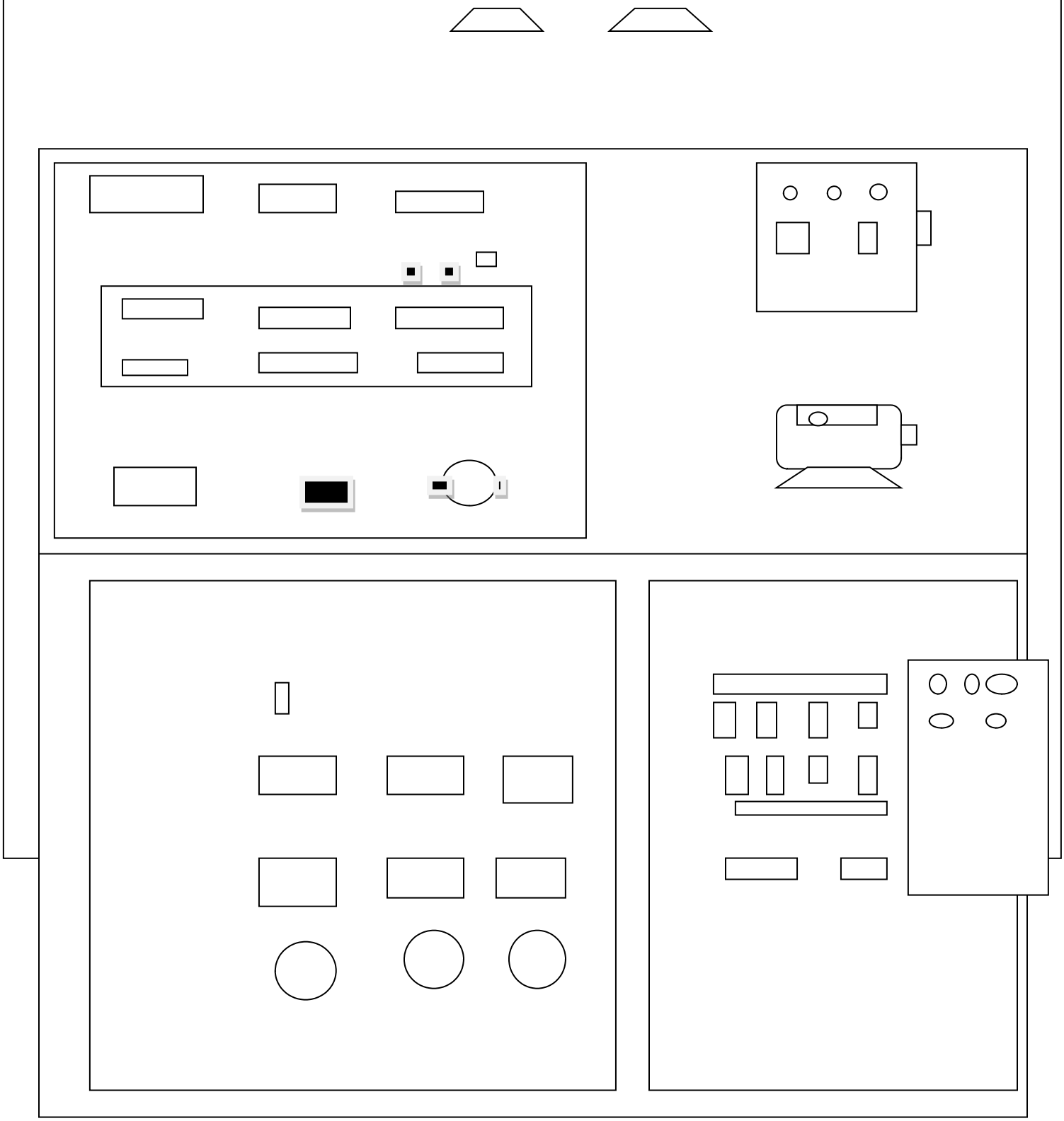


Input logic | Output logic

a	b	3	6 gate	8 gate	11 gate	
0	0					
0	1					
1	0					
1	1					







[TYPE THE COMPANY NAME]

[Type the document title]

[Type the document subtitle]

NKULULEKO SIYANDA MDLETSHE

[Pick the date]

[Type the abstract of the document here. The abstract is typically a short summary of the contents of the document. Type the abstract of the document here. The abstract is typically a short summary of the contents of the document.]

1. Purpose: explanation career center expo science journey of self discovery.

Workbook is a compilation of adapted formal assessment brief career
-project exhibition

-Name : tshingombe Tshitadi
-Date :17/04/2024
Section A: subjects and studies
Section B: skills and ability strengths
Section C:my career interests
Section D: preferred field of study
Section my personality profiles
F:work values
.-design assessment:
-1.subject entry: A,
A:[career electrical technical]--[mathematics informatics :B]---[motoring :C]--
[Saqa award degree level: D]-- [Engineering electrical: E] --- [panel wiring: F], [Skill inventory: G]--
[functionality transfer skill] and outcome's. ---
[Engineering technologies science studies [research Education and training arts audio visual technologies communication architecture Ana construction].
-subject :key design
-10. print "a"
-20. print "b"
-30. print "c"
-40. print "d"
-50. print "e"
-60. print "f"
-70. print "g"
-80. Print. "h"
-90. print "I"
-100.print "j"
-110.print "k"

```
Sub xcl()

'

' xcl Macro

'

'



End Sub
```

-subject :key design

Sub
_____
120. input "a1"
130. input "b1"
140. input   "c1"
150. input   "d1"
160. Input. "e1"
170. input   "f1 "
180. Input. " g1"
190. Input.   "H1"
200. Input. "i1"
210. input   "j1"
220. input "k1"
Sub
_____
230. output ("a1"+"b1"+"c1")
240.output ("d1"+"e1"+"F1")
250.output ("g1"+"H1+"I")
260. Output (j)
Sub
_____
270. if ;{"a1"+"b1"+"C1"}=1
280. Else="t "_subject =next step
290.if ;{"d1"+"e1"+"F1"}
300.else" t " subject :next step
310.{" g1" +"H1"+"I"}
320.else
330. If and . subject step =1
340. Show :outcome display
.350. Next. .string will
_____

Projection: technologie outcom project career:
Design circuit principle career explain diagram
_____
Design logograms:.

Designed Algorigramme.

Designed table:

-a

Design technologie career psychometric Education:
Variable
-education training
Sequence series port impulsion contact mother feeder .
Career total guidence learning CVS switch term work value way cluster selected box peer

-

Logic process

A=011111111111
B=001111111111
C=000111111111
_____; convert binaries .dec
D=000011111111
E=000001111111
F=000000111111

G=000000011111
H=000000001111
 I =000000000111

J =000000000011
 K=000000000001

L1=.   1

L2=.   1

L3=   1

L4=.   1

-Educ technologie career psychometrical
 :
Education logic processes,code module

 Mode phase switch Variance; term

XA=011111111111
XB=001111111111
XC=000111111111
                          ;sum =XA+XB+XC

XD=000011111111
XE=000001111111
XF=000000111111
                          ;sum=XD+XE+XF

XG=000000011111
XH=000000001111
XI =000000000111. ; sum =xD+xh+xi

Xj= 000000000011, sum
 Xj=000000000001

                         ;   Product switch

.-Reder subject outcome: module week term allocation .phase transition outcome level career: elementary, intermediary, senior. Current

-Conductor .semi -conductor switch key career learning: logic binaries code
Module subject average career guidance:
-Module career (sum "a"+"b"+"c") ;(sum "d"+"e"+"f");("g"+"h"+"I").;

- Task career step operate logic input output module learning sum. Module phase elementary, phase subject ,
Modulation scaling block career input ,output phase

-Phase A,phaseB,phaseC,phaseD,phaseE,
PhaseF,phaseG,phase h,phase I,
-Activities:key learner

_____
Module: ligth resistor. Induction learner bulb :

Module :rectifier redresseur phase angle ,diode operator phase sum career
5v logic 1,0r logic 0 volt
Diode code encode display :
Resistor:

Module : phase career amplificator career gain .module transistor, % good average
---

Module disc triac thyristor integrator circuit .
Display subject . % good

.line linearise

Control logic analysis
 asservissemnt:lineare band :
---+---+
Loop input output level grade: sum compare career: equivenlent job input output: dividers
job analyze function job task. Switch. Binary

.task: modulation course subject entry criteria job selected key (phase a. Subject
electrical) statement goal tech industry, psychotic electrical drawing project, method measure instrument. Electrical machine, electricity industries, mechanical workshop lab, language. Actuality electrical grade bulletin service: .education technologies total posting job output internet ship level grade 12 (and) /logic mathematics informatique ms do's window ms work windows, outcome certified statement award , attestation test motoring initiation special diesel essential vehicle, statement , telecommunication, pedagogue technical subject prep. Math physic drawing technical technologies mechanic electrical logic,rwiten sleek expression civism, electrotech , psycho pedagogie,didactic special ,intro psychopedagogie, orientation professional, electromechanic machine elect thermodyn chemical metalurgi statistics,
---
Task phase :Ccma seta council labour , outcom -security

Task phase:Engineering saqa n diploma

 subject engineering n diplome interpretation log : assessment
-panel electrical wiring
Subject statement outcome: course module mathematics, engineering science,trade theory electrical , engineering drawings,:electrotech electrotech. National trade diploma

, industrial electronics trade , average, assessment police ,
 career :

Graduate program: Alison , Microsoft, schedule :,
Ccma labour security officer,policy intelligence

Records

_____
-modulation 3month 90 days allocation credit 360: term .
Outcom career transmission generation
Graduate:post senior

Total: faculty course total computing
-guidence outcom generation: engineering senior :engineering transmission dispatch custom +Dev op information ITC mathematics data science network path+special research motor +trainer training seniors educator technic ,job post subject , generalist A1,2,

-sum a,b,c=. ,sum ,d, e,f=. sum= g,h,I:

Asservissemnt synchronisation phase level equivenlent level grade,phase Angela 3month linear non linear scale synchronise , equivenlent trade, professional

- task module reader
Modulation ,activity
-Research operationel:method research career implementation career join venture subject course tendered minimum close contractor quotation compagny key learners step A+B+C
Module
-research phase oscillator local signal A B .command network services
-display register key .plate .display line pin address.vertical map, horizontal map
AX=100000000000,AY=10000000000,
Az=10000000000, , base synch
Amplificator operationel Ax,Ay,Az
Resolve variance ,covariance equation linear ax+by+c=0, .ax°+by+c...ax+by+cz=O..
Dimensionnement algorithm,scale
-Research operationel
-lecture reading module activities career outcom disc task call recall career module term asservissemnt lineare detector convert base binairy.decimal disc detection Ax=1000000000,recall accumulation register key Ax,A,yAz,key to flip flop amplificator lecture career move file read lecture captor analyser task .tap recording memory heater accumulation career.

Research map(xa,ya,az) operationel career work outcome :transited job duty functional line Project key :
Transfer :research intelligence artificial genie mil ,civil ,technical security instruction key duty ,safety health labour display. Career intelligence re Engineering, outcome job opportunity scaling , coordination ordination axes x ,y,z, Cartesian projection find job map transition

2. Referral librarie casebook photocopy project

DISCOVERY CAREER ;

-JOB DISCOVERY LIBRARIE; BOOK JOB INVENTORY JOBCAREER CAREER

-LEARNER DISCOVERY CAREER: JOB TOPIC CASE BOOK COMPAGNY

-FACILITATOR DISCOVERY CAREER: JOB TOPIC CASE BOOK COMPAGNY AGREEMENT

-LEARNER NAME:
……..

-FACILITATOR:
……

NAME:……;
……..

-MODERATOR NAME:
……

-ASSESSOR NAME:
……

INSTITUTION NAME:
……..

HR:RESOURCE FRAMMEWORK: CLOSE COMPAGNY

LIBRARIE PUBLIC JHB:

SCIEBONO CAREER CENTER LIBRARIE:

COST PROJECT FILING:

Tools assessment librarie and material assessment project librariecareer center

ENTRY CRITERIA /TASK BOOKING MAGAZINE

ID ORDER BOOKING	TOPIC BOOKING	COST BOOKING	TOPIC PROJECT COST COMPAGNY DESIGN/ COMMENT REVIEW
WEB SITE:			
NEWS PAPPER			
MAGAZINEGUIDELING TVET			

OUTCOME EXHIBTIION PROJECT COMPAGNY

ENTRY CRITERIA TASK BOOKING MAGAZINE

ID ORDER BOOKING	TOPIC BOOKING	COST BOOKING	TOPIC PROJECT COST COMPAGNY DESIGN

Inventory framework education lesson plant portofolio teach engineering :

4x6 subject = , 120 volume record textbook , engineering nated n1,n6/vs 10 copy exam papper theory practical subject :

Literature code practical trade , eic nated teach code work ..

Inventory engineering framework assessment plant work project formulation note book

Code engineering

TITLE:

ASBN:

AHTHORY:

SUBMISSION:

ORDER BOOKNG ACCOUNT:

EXHIBITION JOB BOOKING COMPAGNY: TRADE BUSINESS JOB

: EXHIBITION POST JOB

JOB ENGINEERING STUDIE POST TECHNCAL, SCIENCE ENGINEERING ENTRY POST

EXHIBITION, S

JOB SECURITY /ENTRY STUDIE, POLICY: ENTRY EXHIBITION

SCIENCE ENGINEERING JOB DISCOVERY NATURAL ANALYSE INVESTIGATE DEVICE JOB

JOB REQUIREMENT:

JOB ABSTRAL:

JOB PURPOSE:

JOB SUBMISSION

JOB KNOWLEDGE:

SCORE: MISSION, VISION GOAL

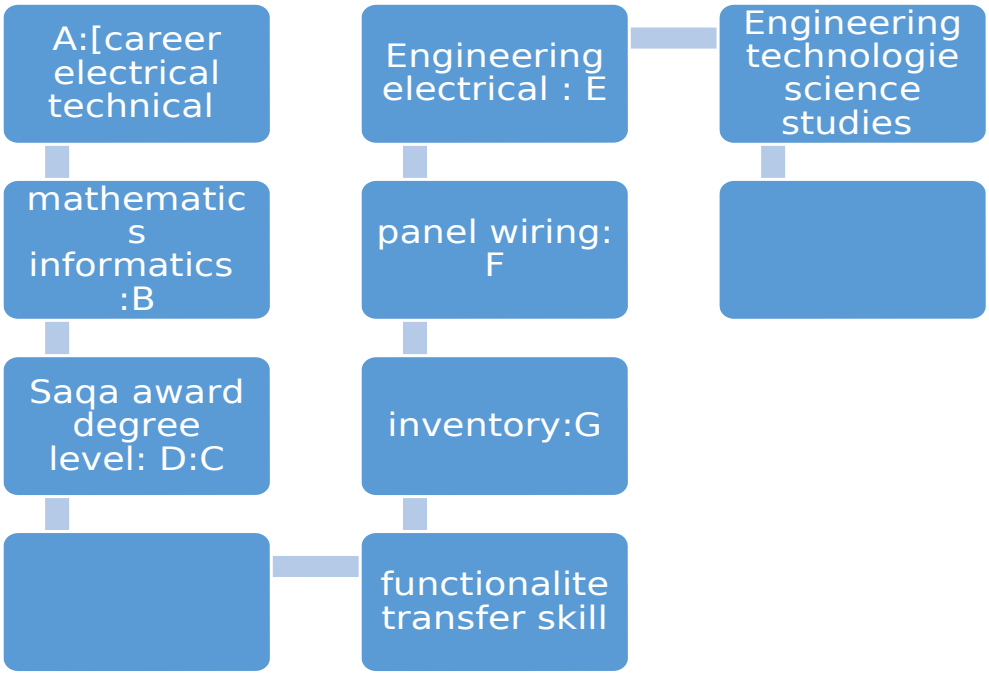
AMANDEMENT,

REWARD , EARNERD BADGET RECORD SCRIT

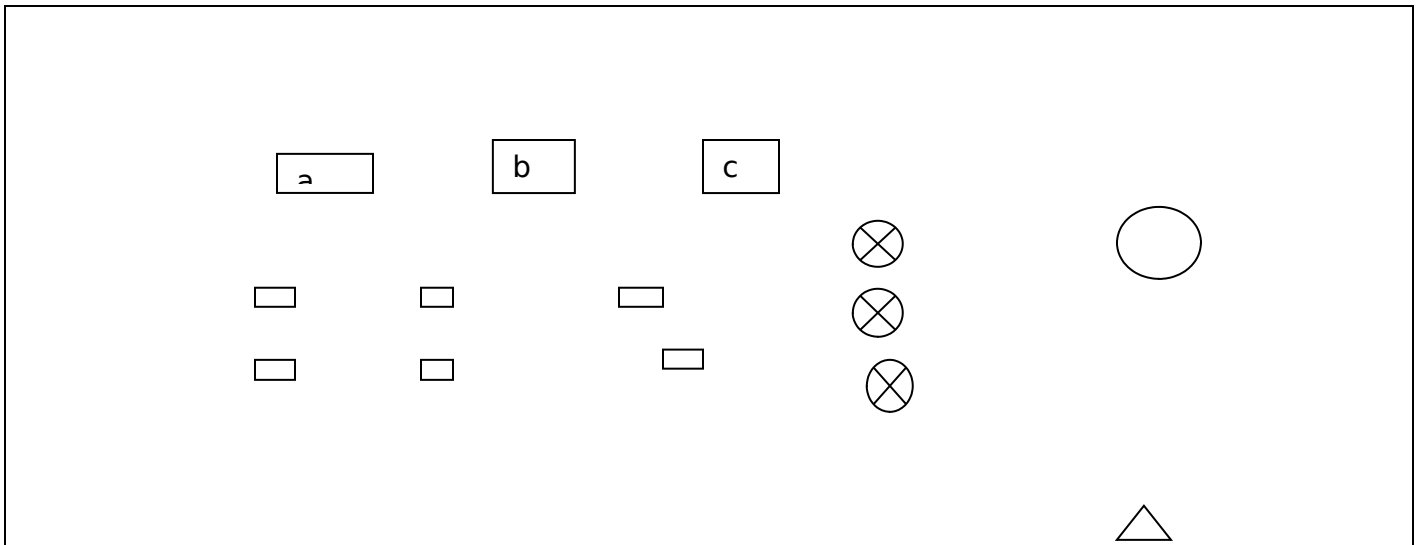
CERTIFICATE POINT LOYAL

COPYRITHH JOB

Cost project estimation value award studie discoverie revised cost made : labour insurance coid award , social work



Design career technologie

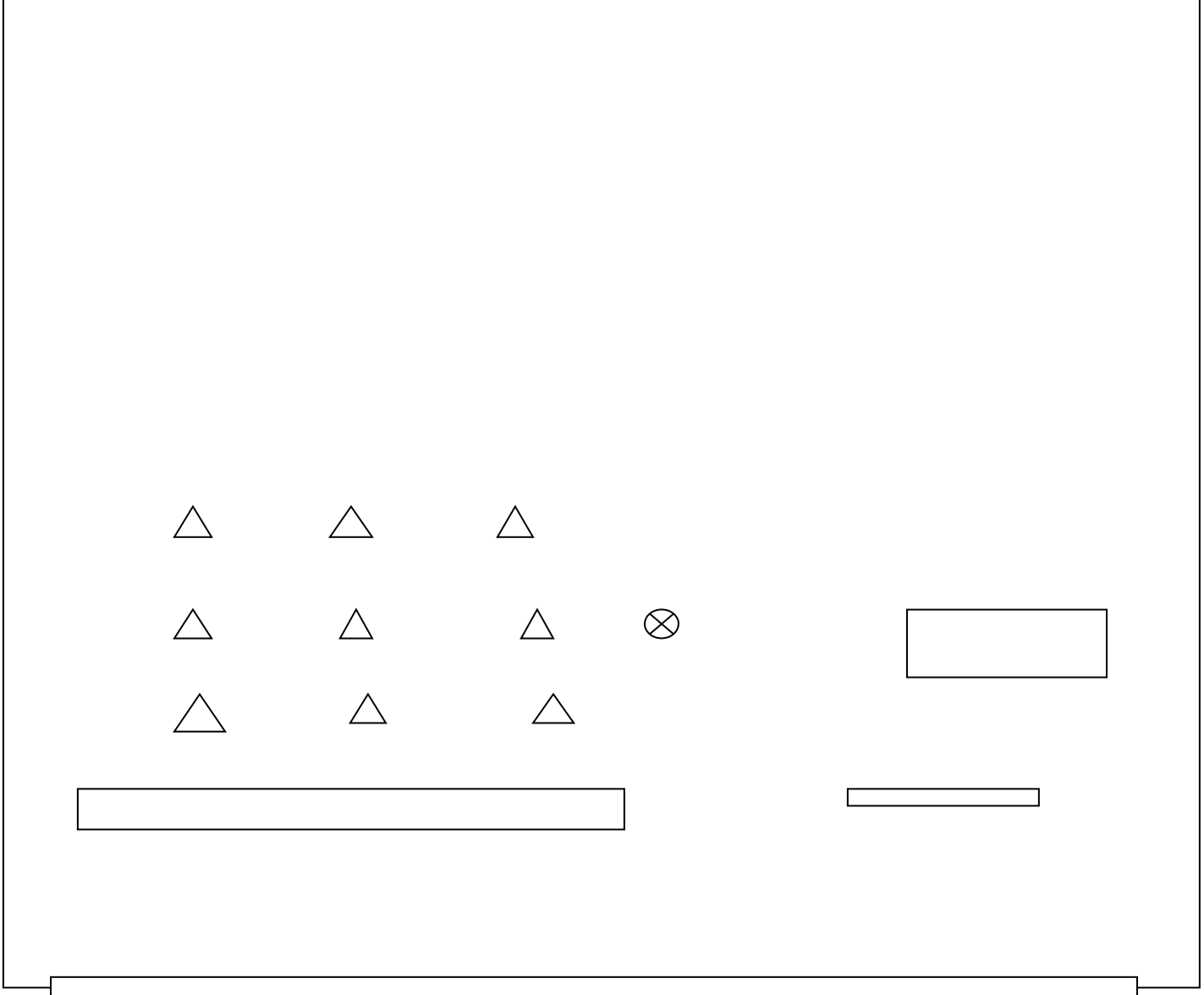


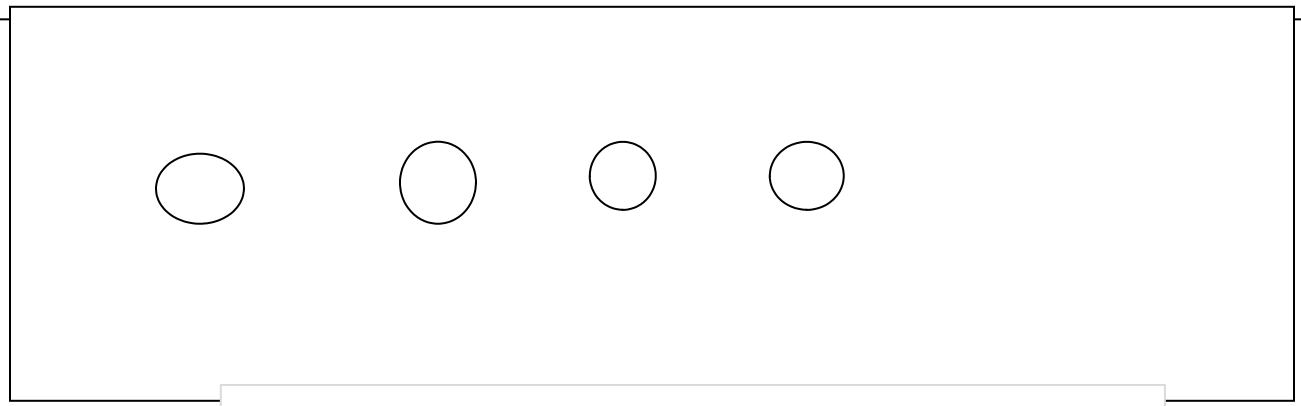
a	b	c	d	e	f	g	h	i	j	k	L 1	L 2	L 3	L 4	D 1	D 2	D 3	D 4	m
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0					
1	1	1	0	0	0	0	0	0	0	0	1	0	0	0					
1	1	1	1	0	0	0	0	0	0	0	1	0	0	0					
1	1	1	1	1	0	0	0	0	0	0	1	0	0	0					
1	1	1	1	1	1	0	0	0	0	0	1	1	0	0					
1	1	1	1	1	1	1	0	0	0	0	1	1		0					
1	1	1	1	1	1	1	1	0	0	0	1	1	1	0					
1	1	1	1	1	1	1	1	1	0	0	1	1	1	0					
1	1	1	1	1	1	1	1	1	1	0	1	1	1	0					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					

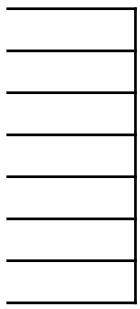
Design education electrotechnologie activity task module switch

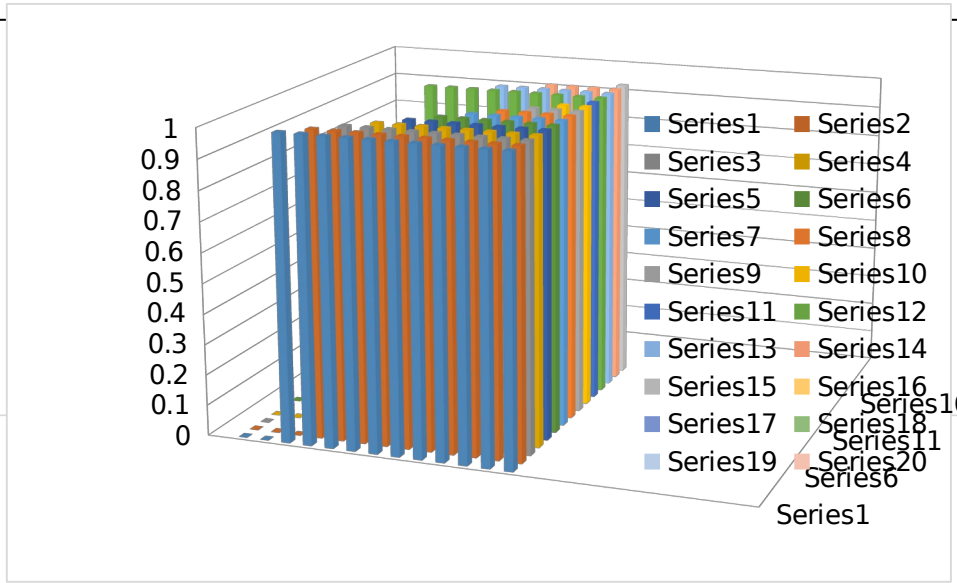
Enhinering

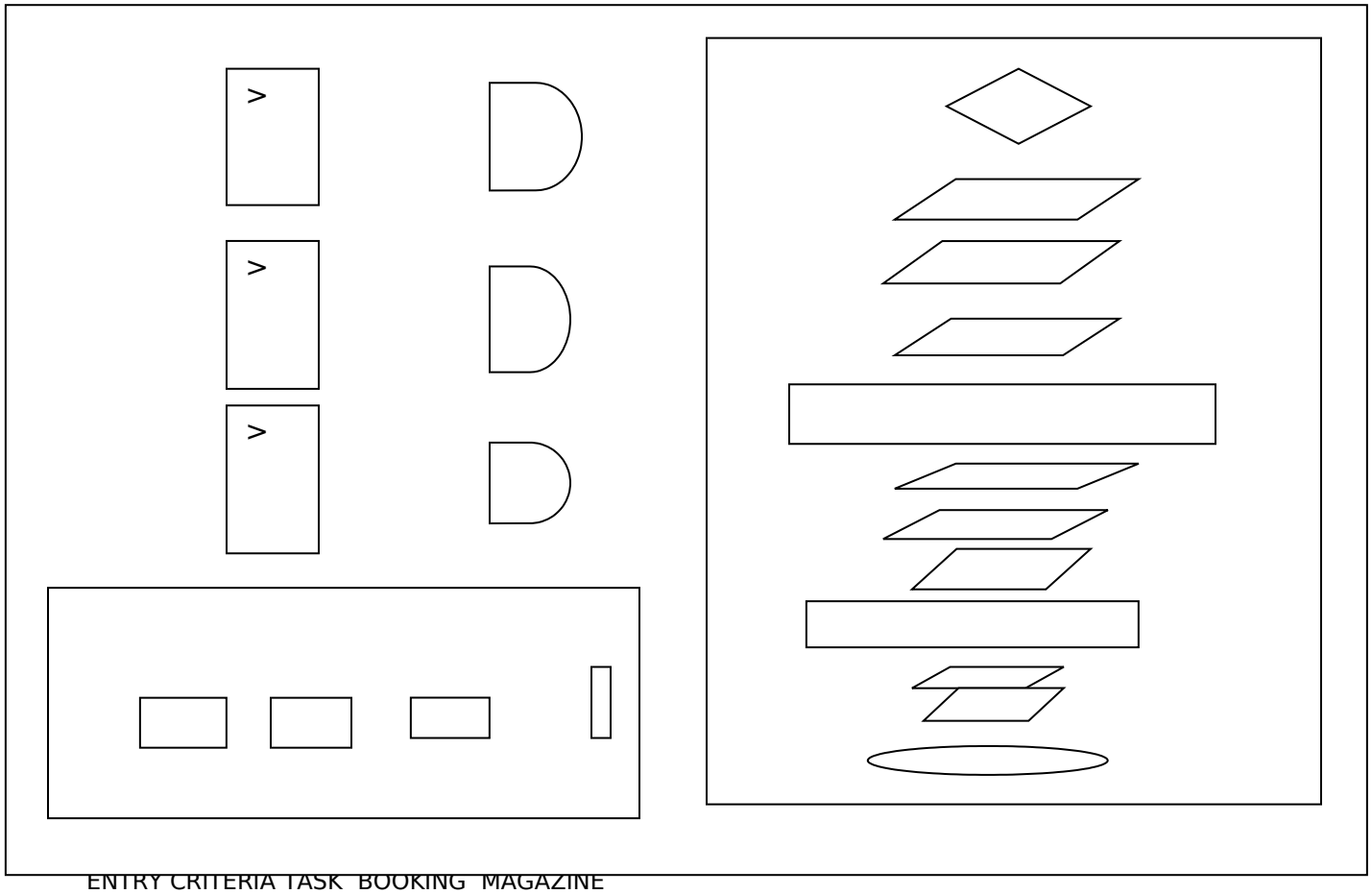
a x	b x	c x	d x	e x	fx	g x	h x	ix	jx	k x	L 1	L 2	L 3	L 4					
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0					
1	1	1	0	0	0	0	0	0	0	0	1	0	0	0					
1	1	1	1	0	0	0	0	0	0	0	1	0	0	0					
1	1	1	1	1	0	0	0	0	0	0	1	0	0	0					
1	1	1	1	1	1	0	0	0	0	0	1	1	0	0					
1	1	1	1	1	1	1	0	0	0	0	1	1		0					
1	1	1	1	1	1	1	1	0	0	0	1	1	1	0					
1	1	1	1	1	1	1	1	1	0	0	1	1	1	0					
1	1	1	1	1	1	1	1	1	1	0	1	1	1	0					
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					







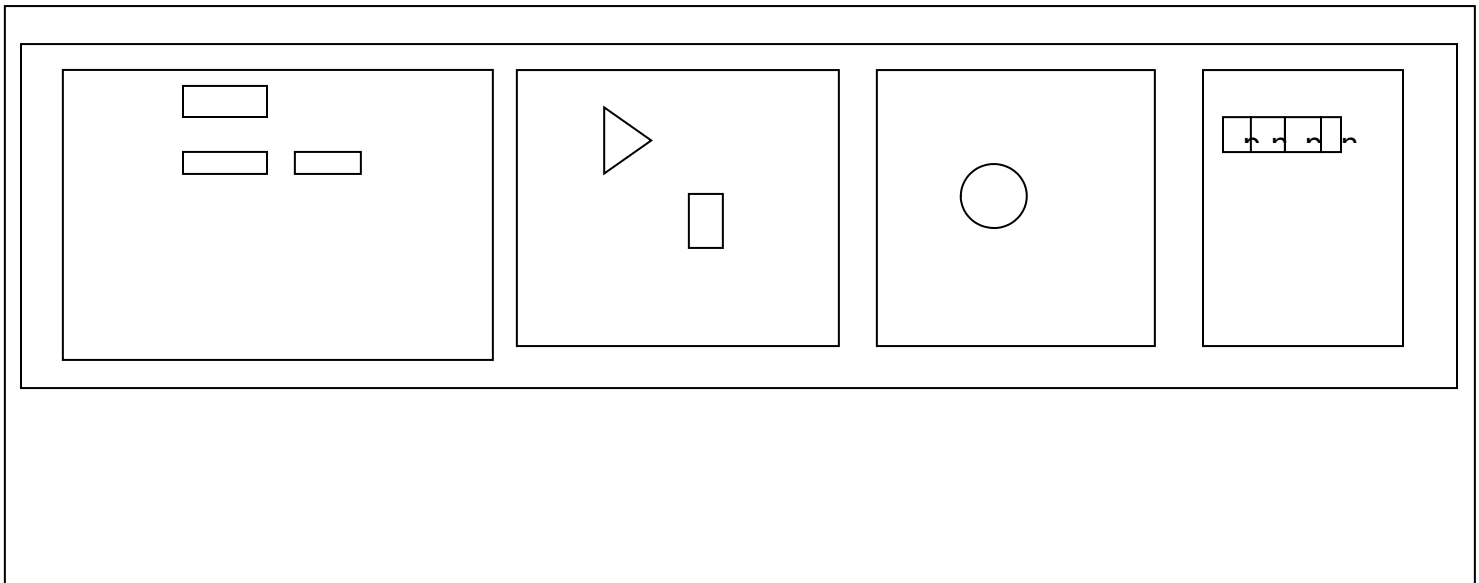

1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Series1
Series2
Series3
Series4
Series5
Series6
Series7
Series8
Series9
Series10
Series11
Series12
Series13
Series14
Series15
Series16
Series17
Series18
Series19
Series20
Series16
Series11
Series6
Series1

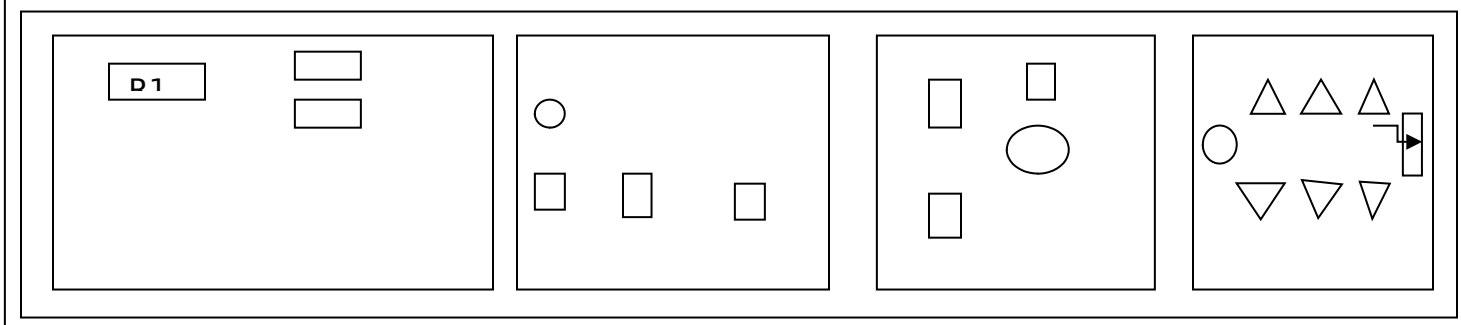


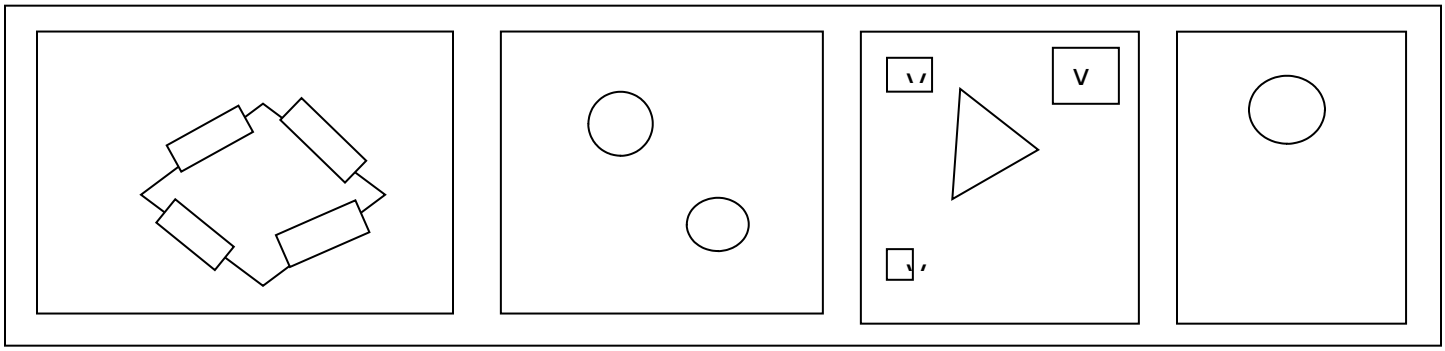
ENTRY CRITERIA TASK BOOKING MAGAZINE

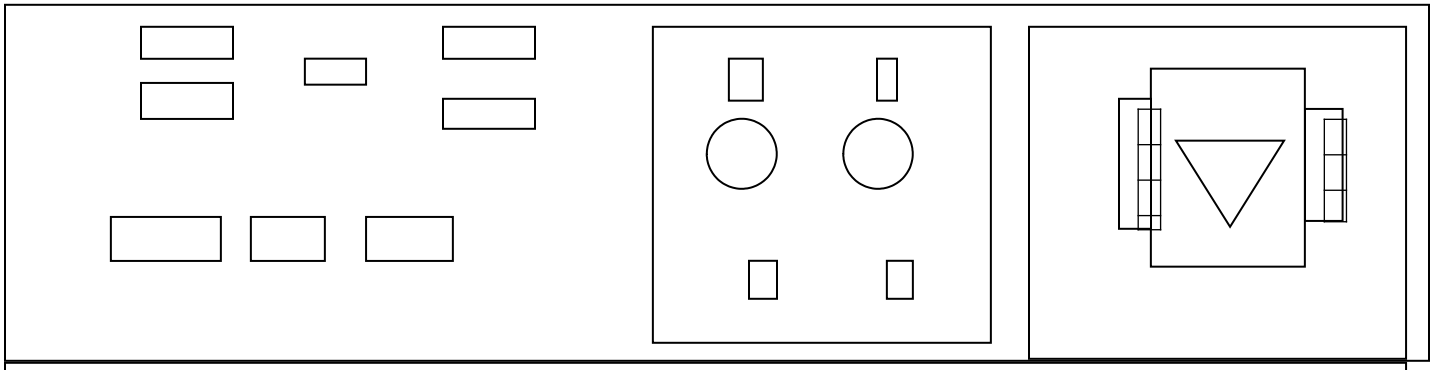
ID ORDER BOOKING	TOPIC BOOKING	COST BOOKING	TOPIC PROJECT COST COMPAGNY DESIGN
Discovery sciebono 16pg review **R**	Assessement Career	R	Scie bono discovery centre , scie bono science career cente my journey of self discovery
Discovery R guid	Assessment considerer	R	How to build your self a bridgth technical future Consider atechnical career let get down to to work how do I play play for my th fact how to built your self

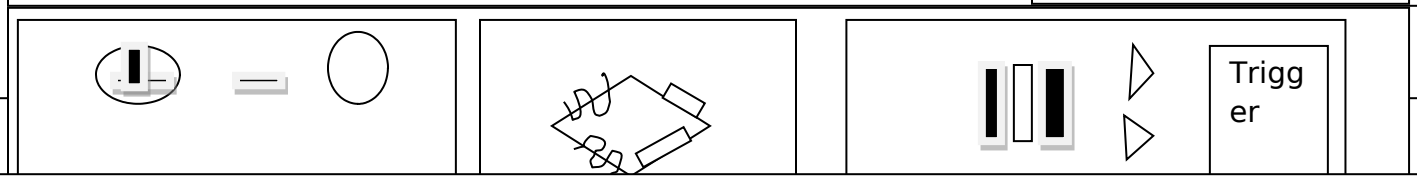
R discovery book	TOPICS CARER Planning	R	-workplace readinees ,module 2 career development prticipale
R	Activity example tip toolkit	R	Topics: career planning , wath is career yourself - Exploring your option - Making informed career - Take action education skill civi
Birthday parties **Id guid**	Assessement	R2200 R2500	Planetarium paking Clumbing wall package secret lab
Merseta , inseta , Guide Chieta	Assessment	R	Manufacturing engineering and related service seta Determine level framework manufacture level subject open ,vocation ocuupation , skill program , registration learning , rpl programe registration difference Occupation tvet college list Skill employment unity existing emp[loyer
Minin qualificaion **Saqa ,** **-civil engineering saice** **-science and technologie / nrf/saaata**		R	Guide joint the dynamic wanted of mining and mineralised Topic:s building concret road way municiplity Topic: nanotechnologie electronics nono science concil science , material semie conductor safety , transistor computer memo rom ram , Topics industrie , industrial , electrical building

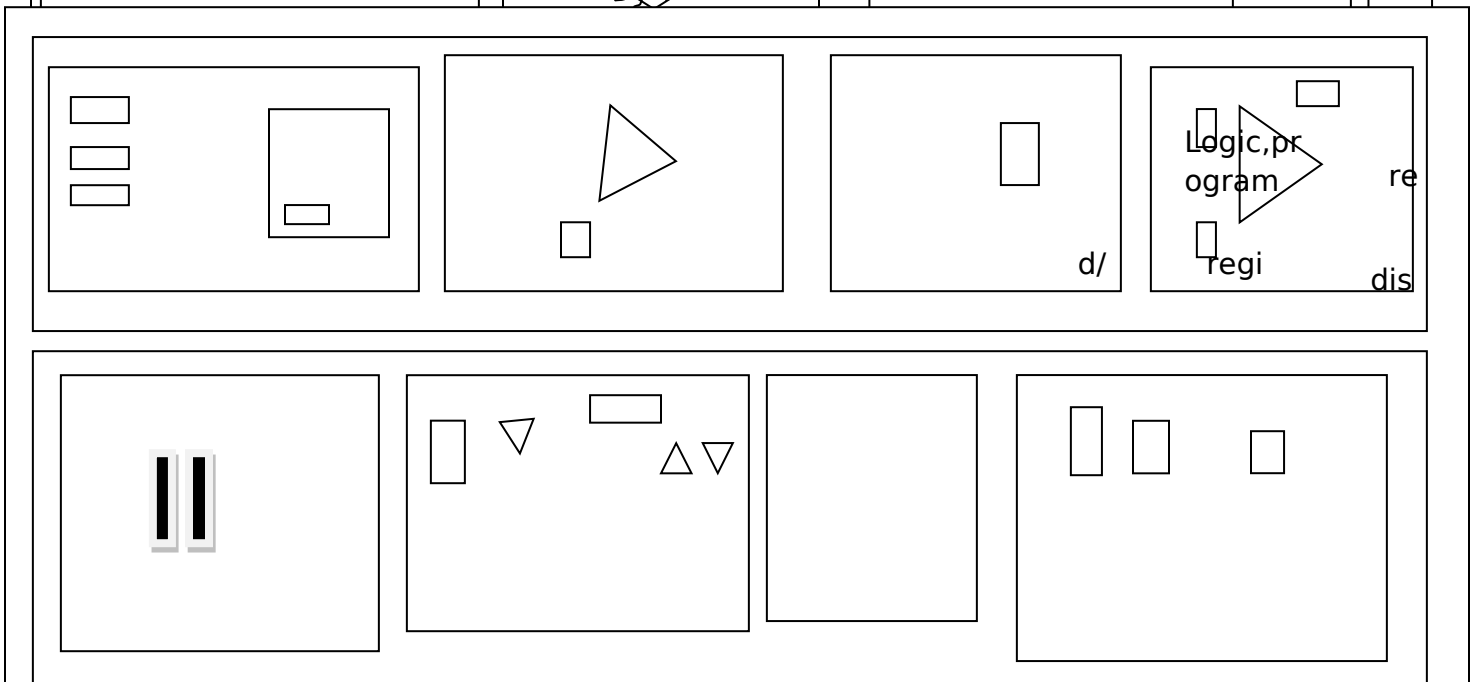


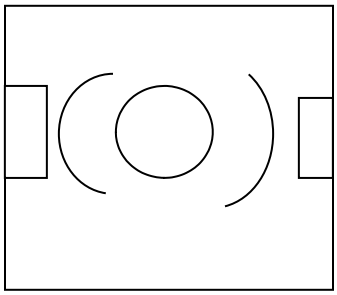

B1

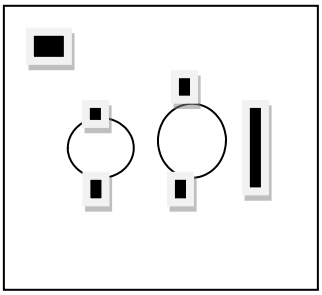


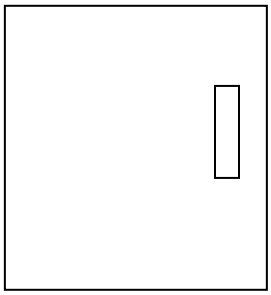


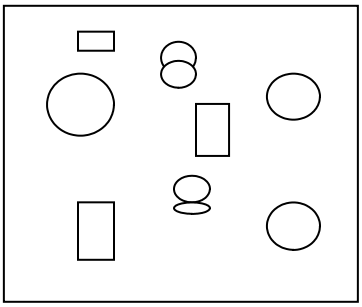

Trigg
er

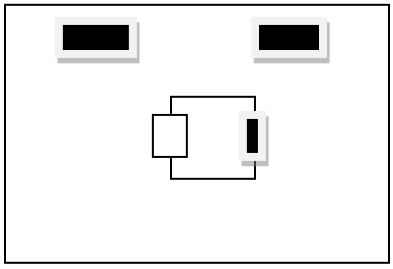

Logic,pr
ogram
re
d/
Regi
dis











Scmitt,trigg er

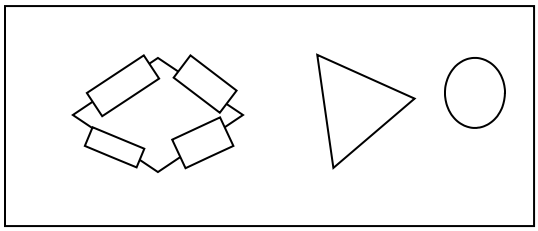
And gate

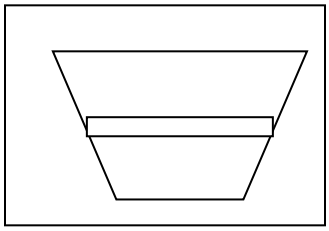
counter

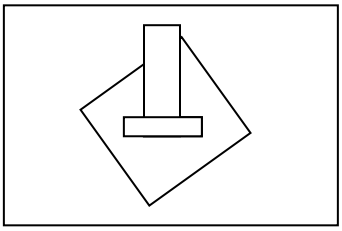
Red raw

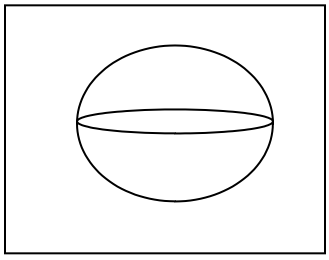
oscillator

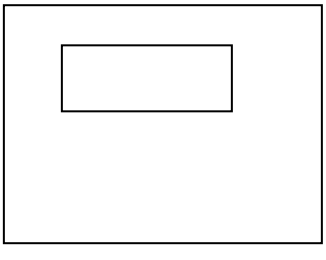
Time ock

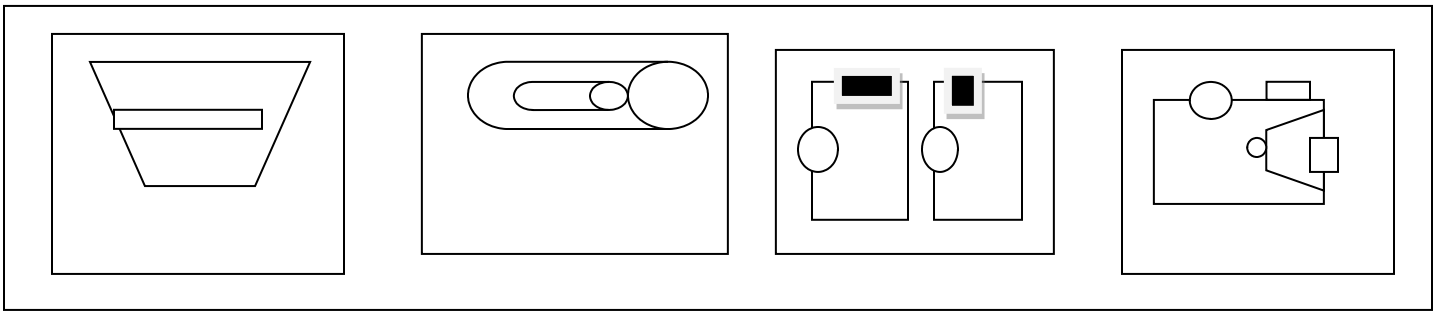


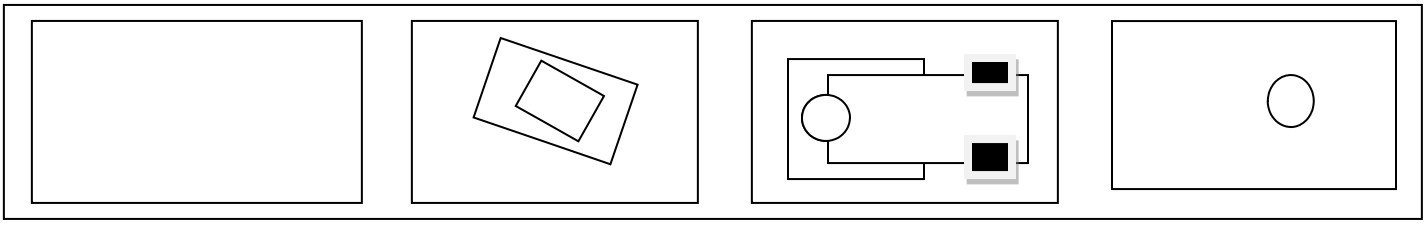


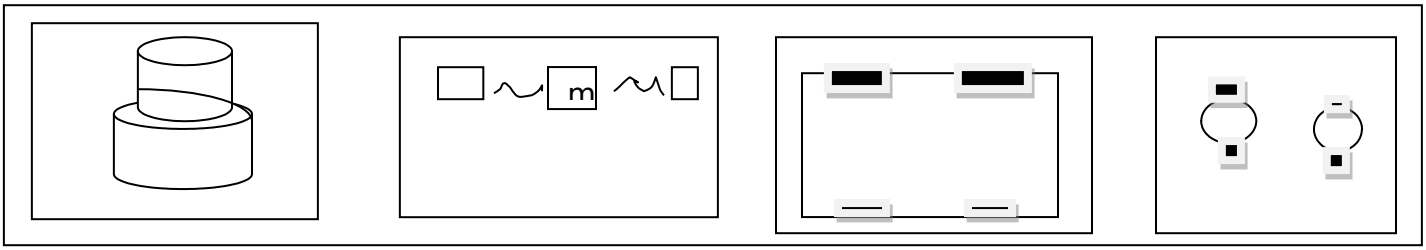


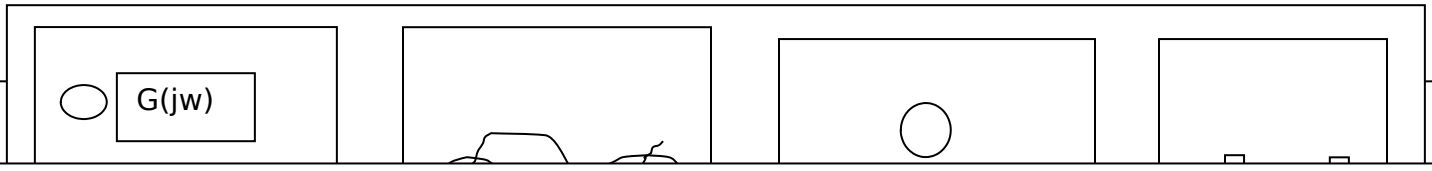










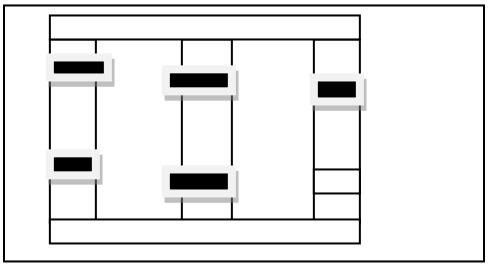


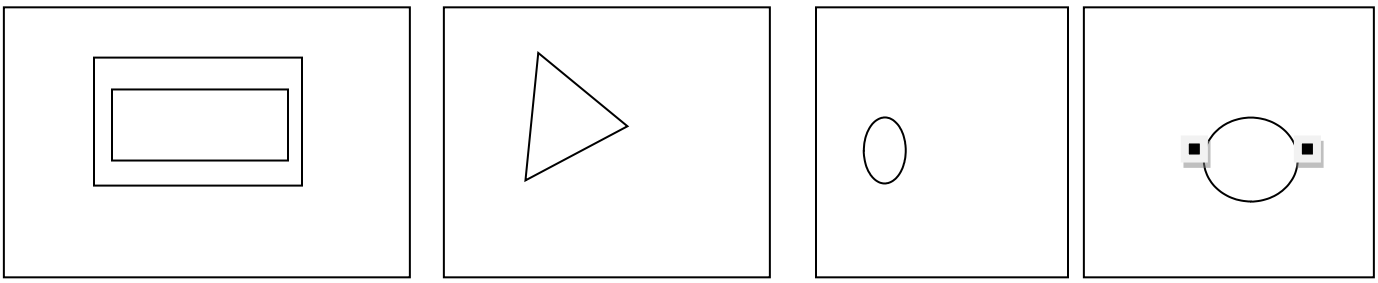
Manangem
ent

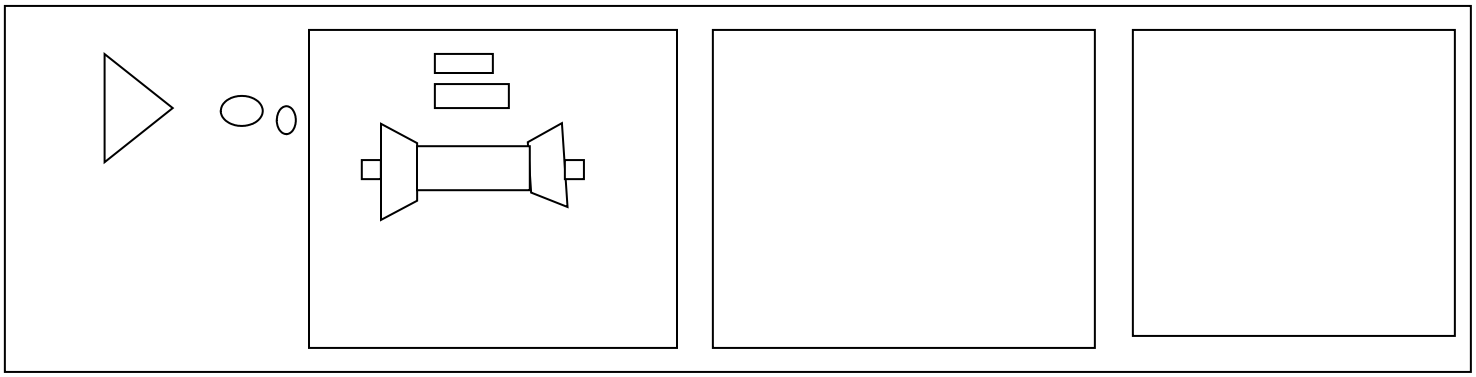
executive

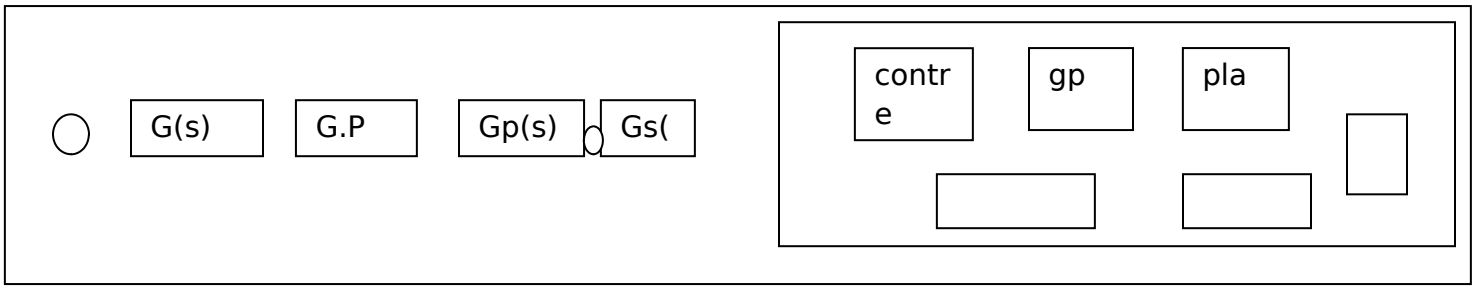
Decis
sion

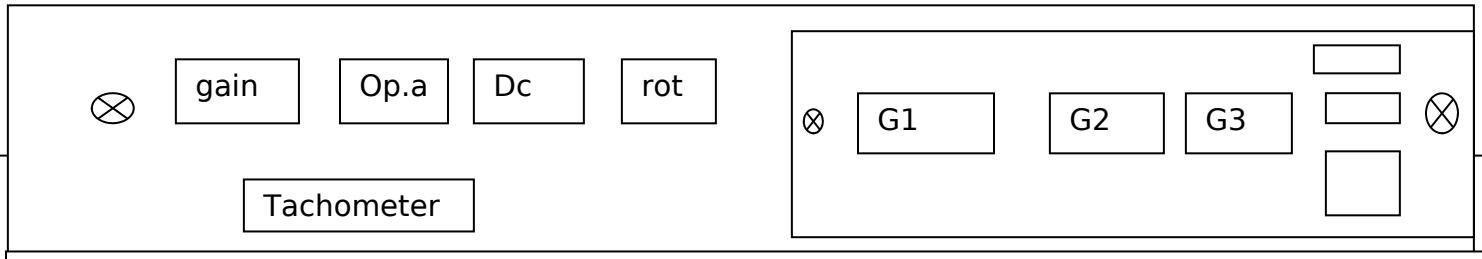
Transaction

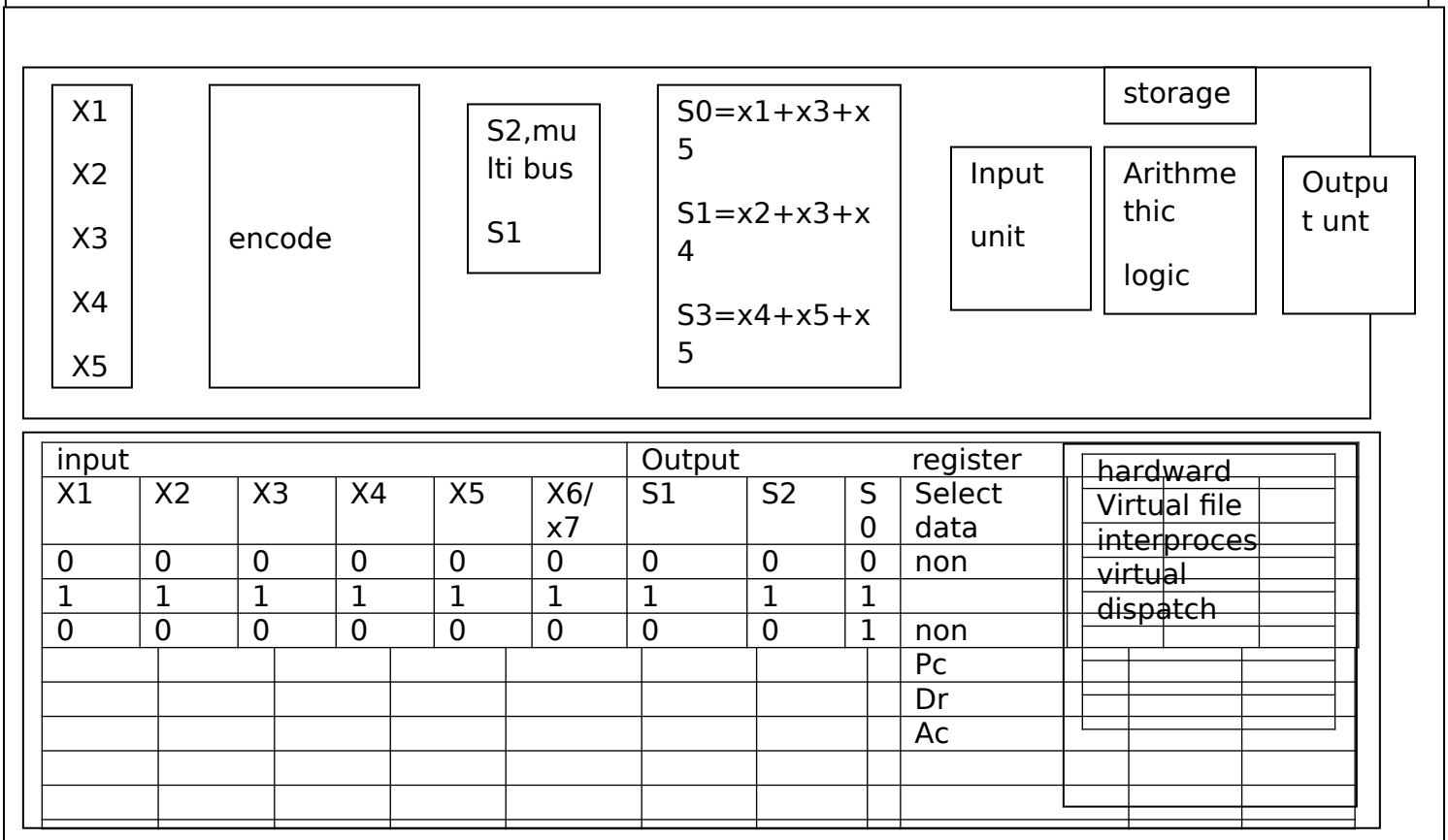






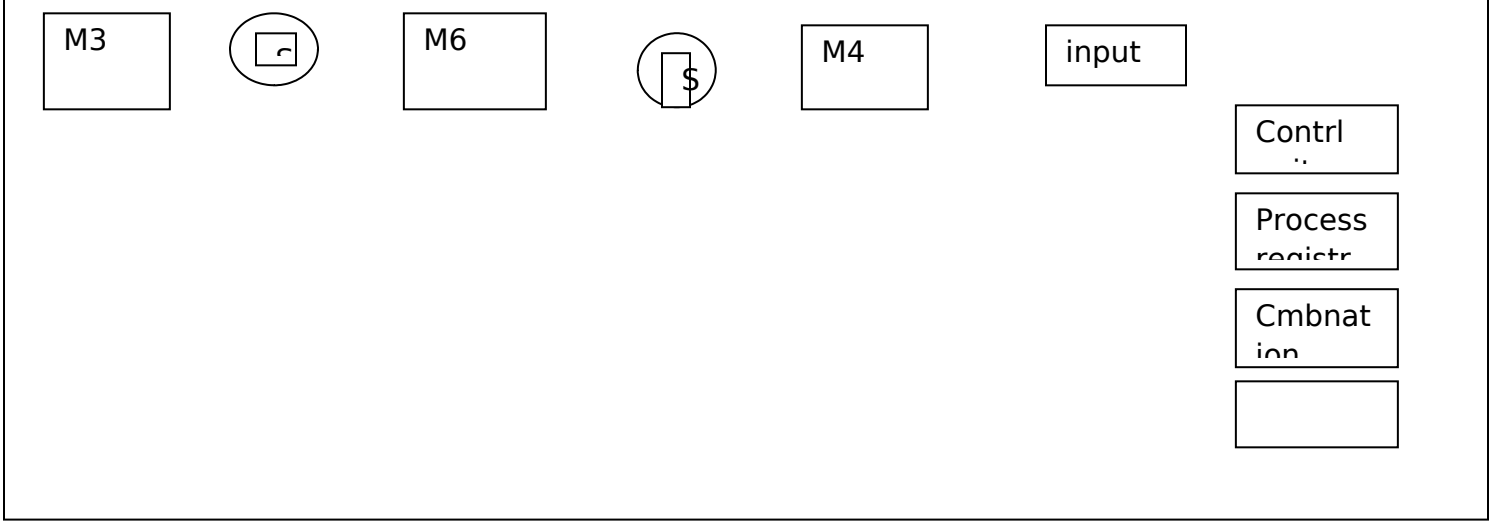


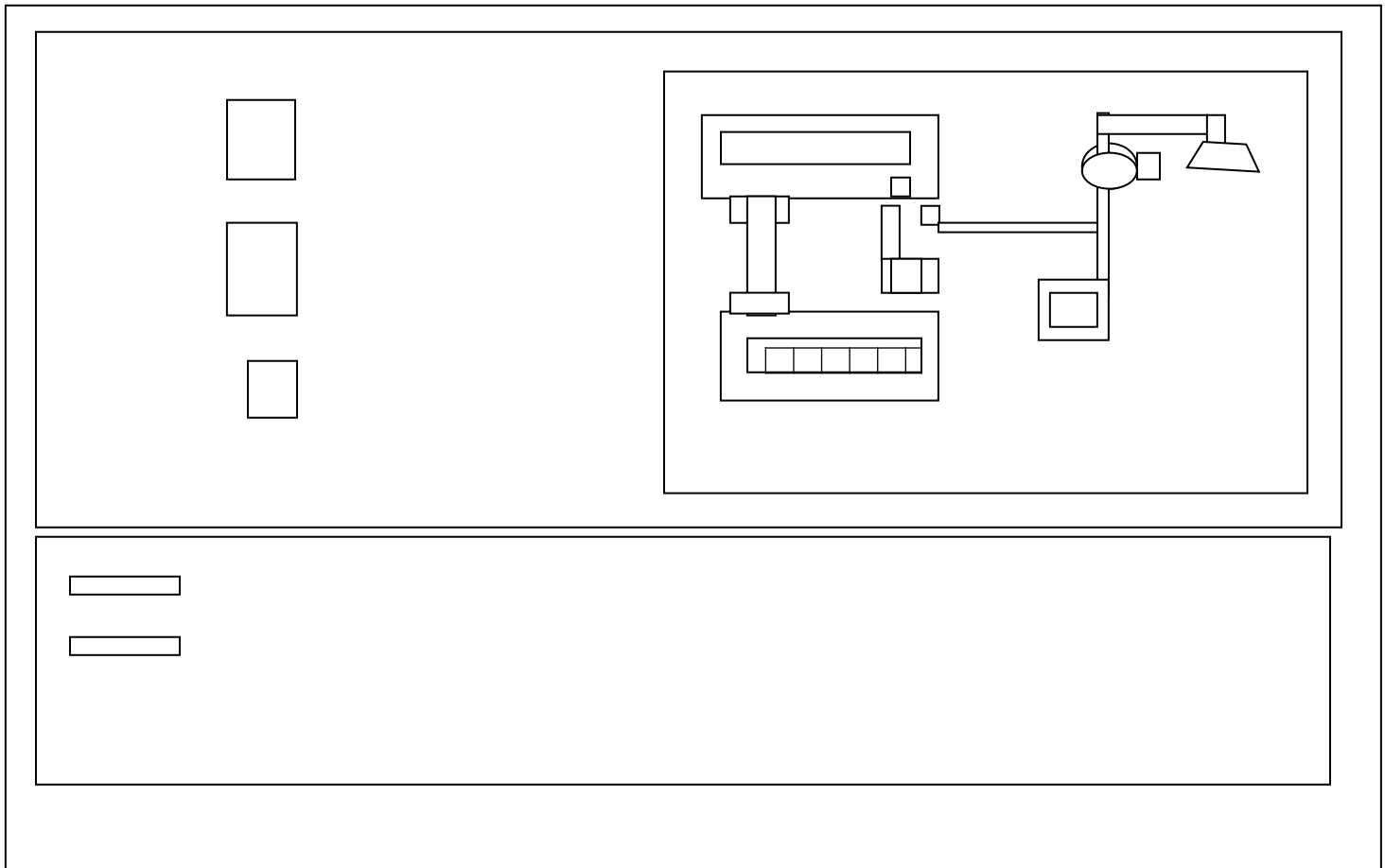


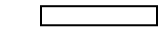


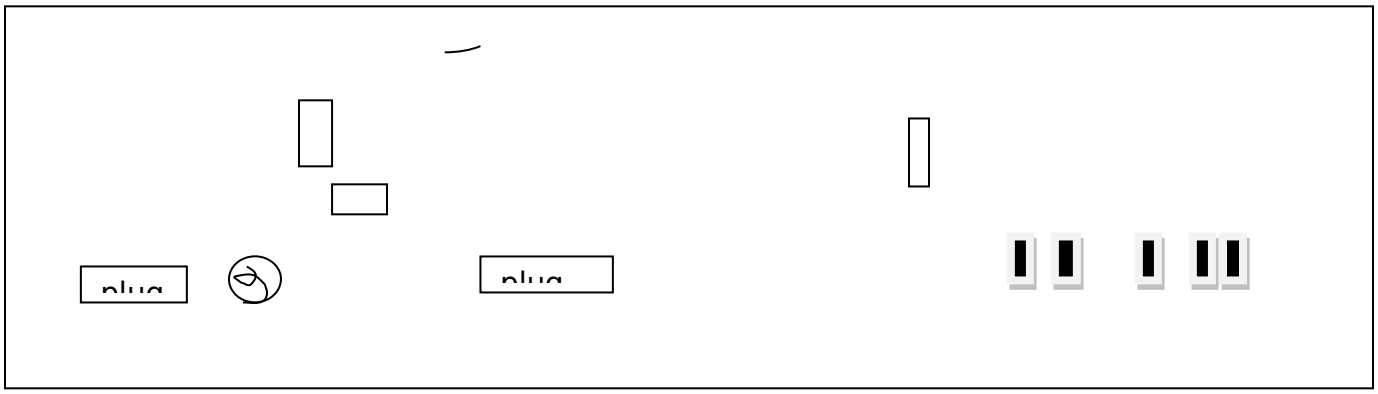
input						Output			register
X1	X2	X3	X4	X5	X6/ x7	S1	S2	S 0	Select data
0	0	0	0	0	0	0	0	0	non
1	1	1	1	1	1	1	1	1	
0	0	0	0	0	0	0	0	1	non
									Pc
									Dr
									Ac

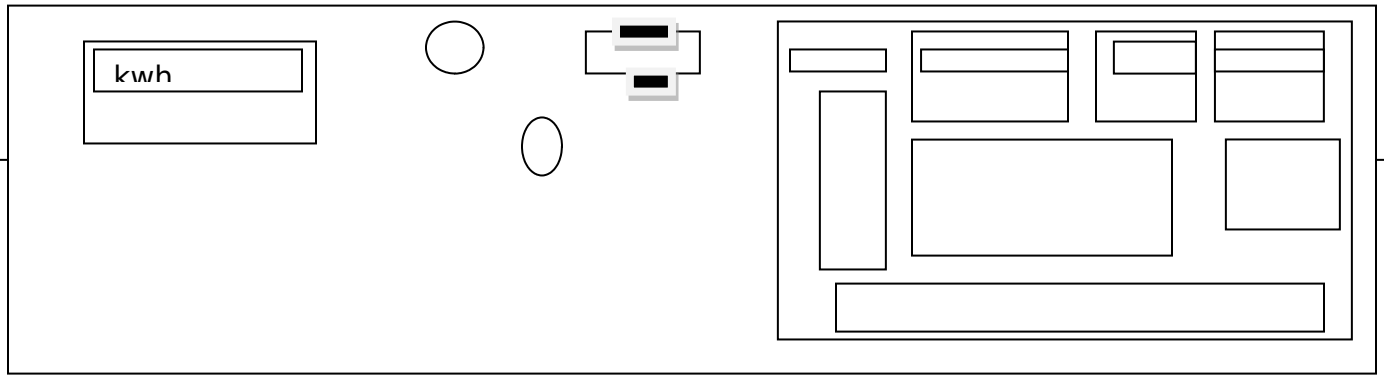
hardward
Virtual file
interproces
virtual
dispatch

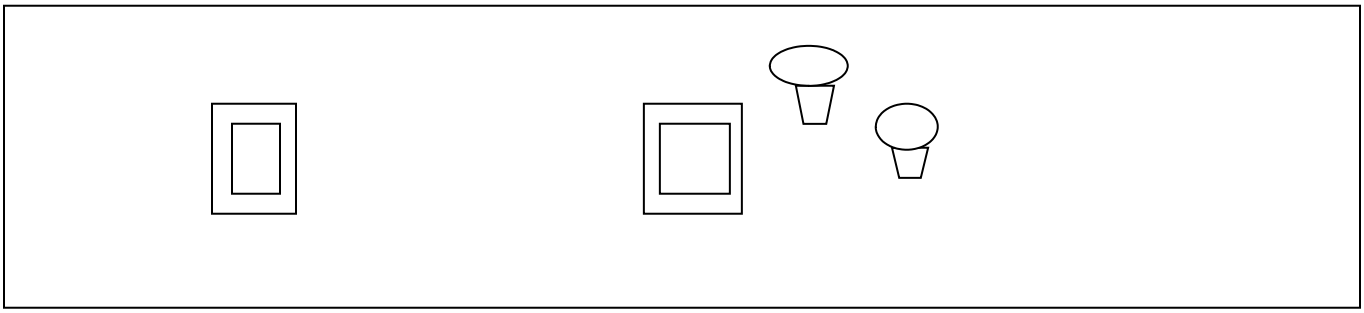

M3
M6
$
M4
input
Contrl
Process
Cmbnat
ion

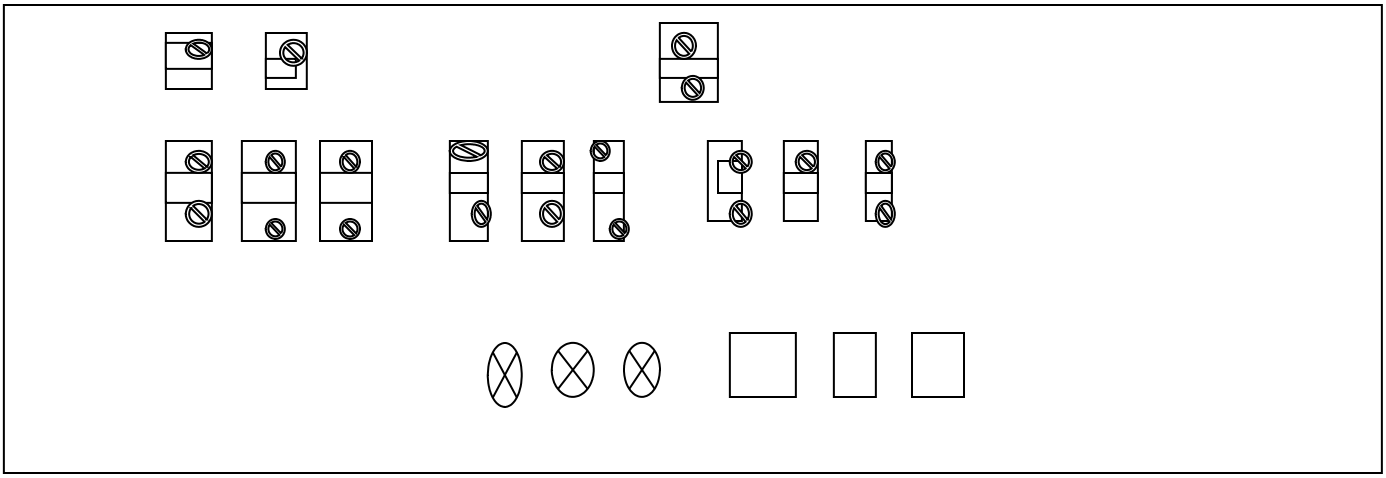


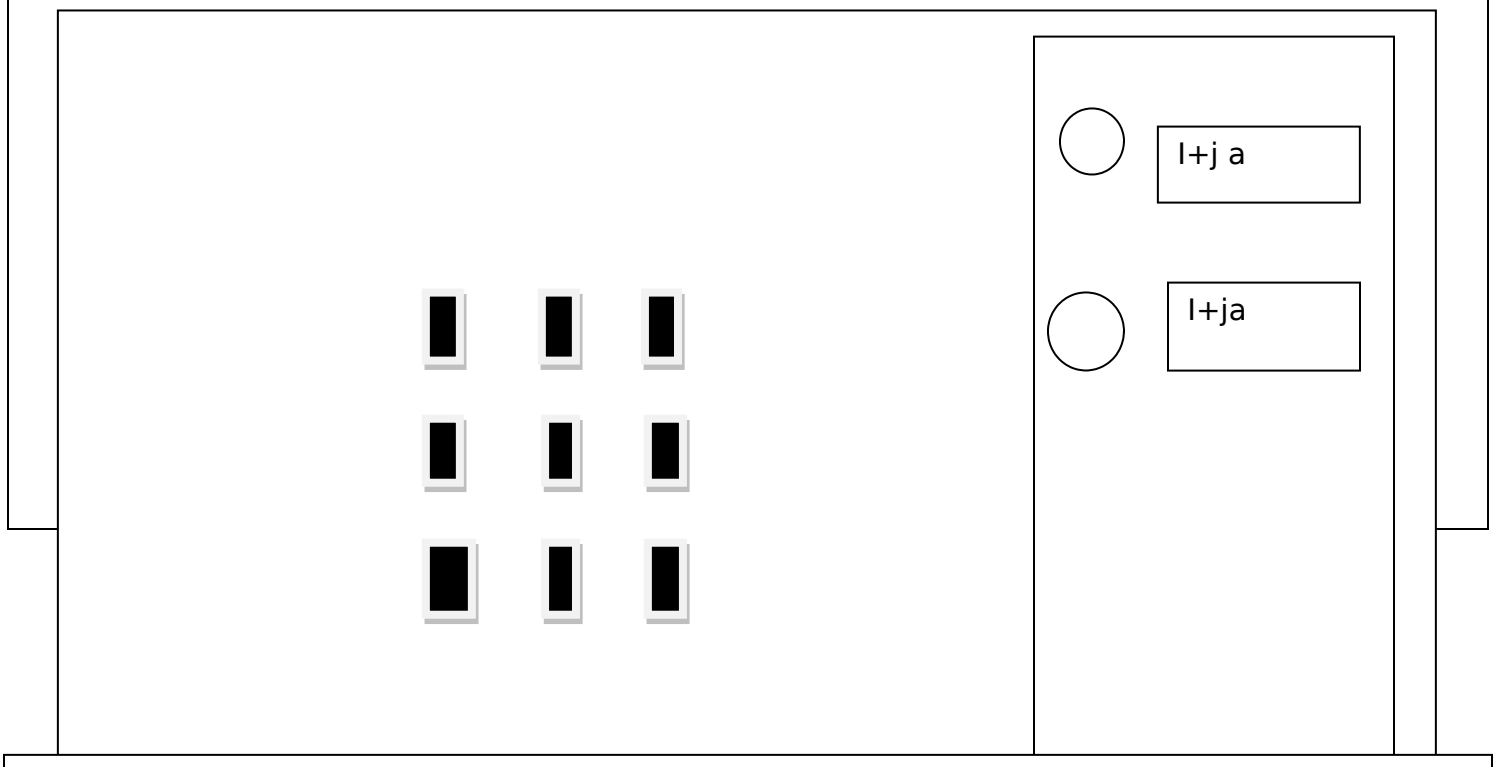


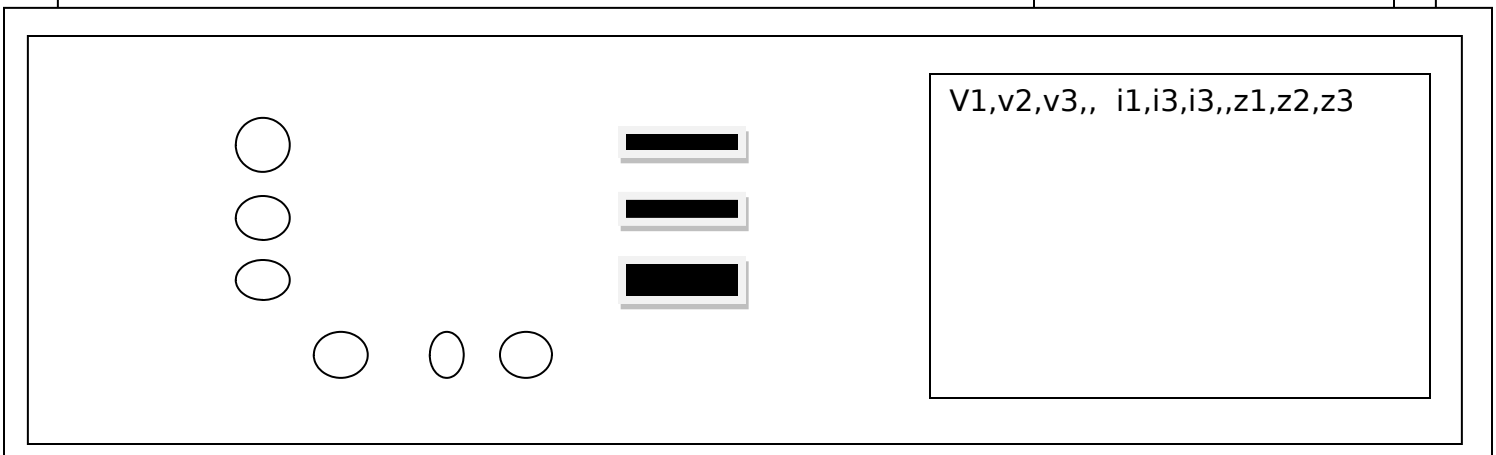

plug
plug

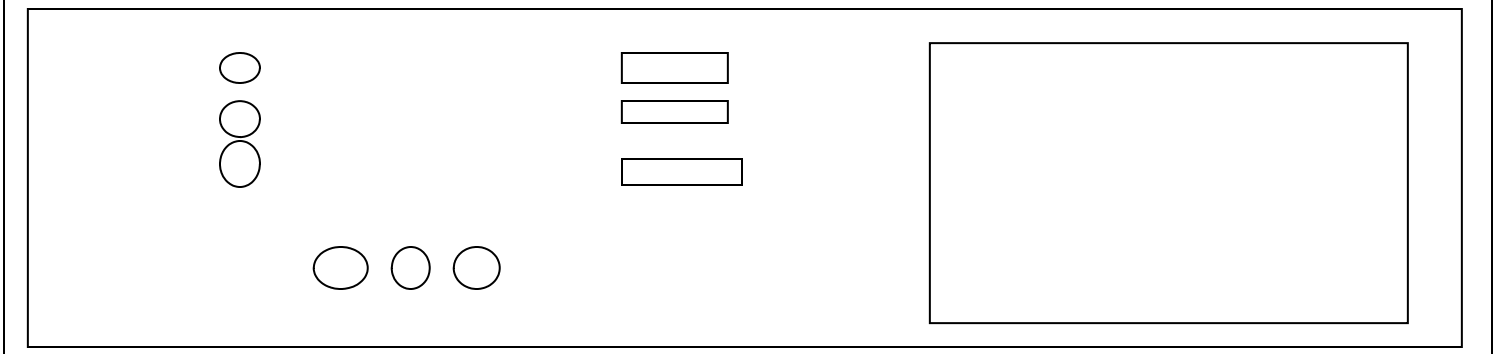

kwh

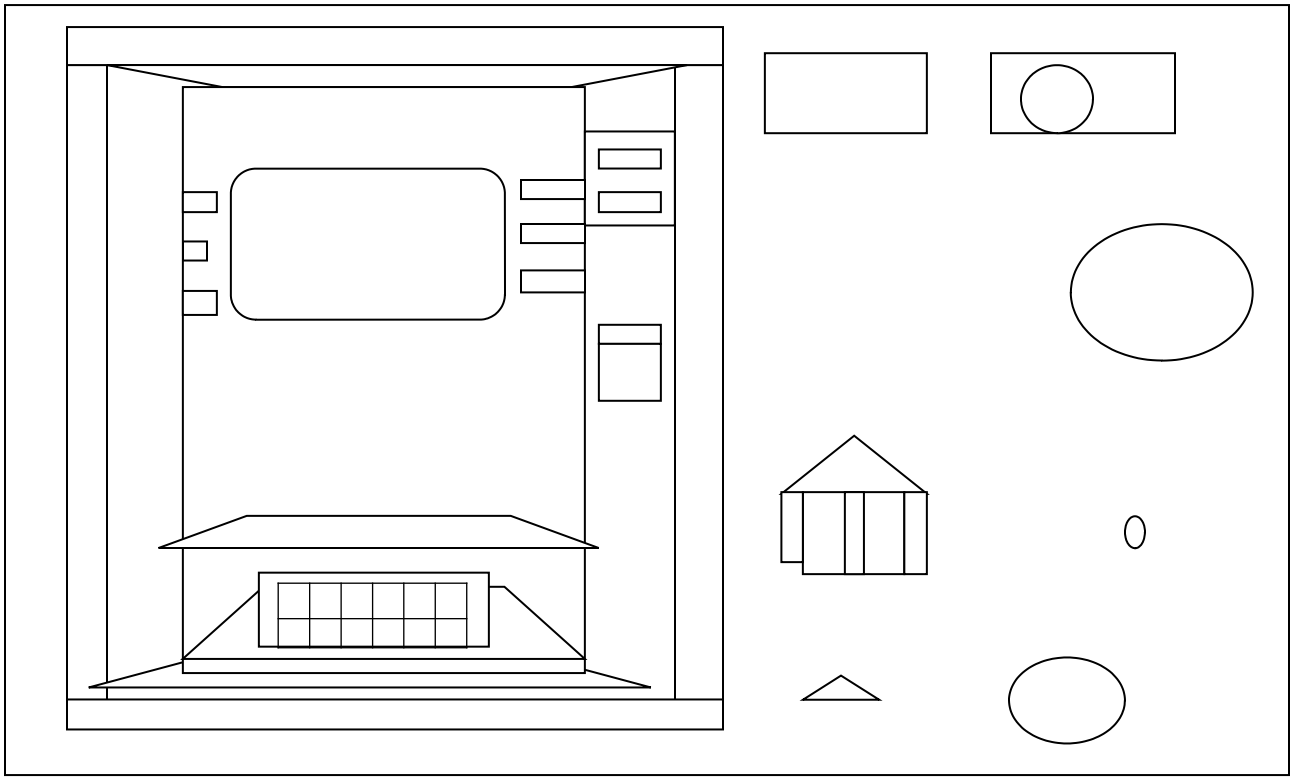


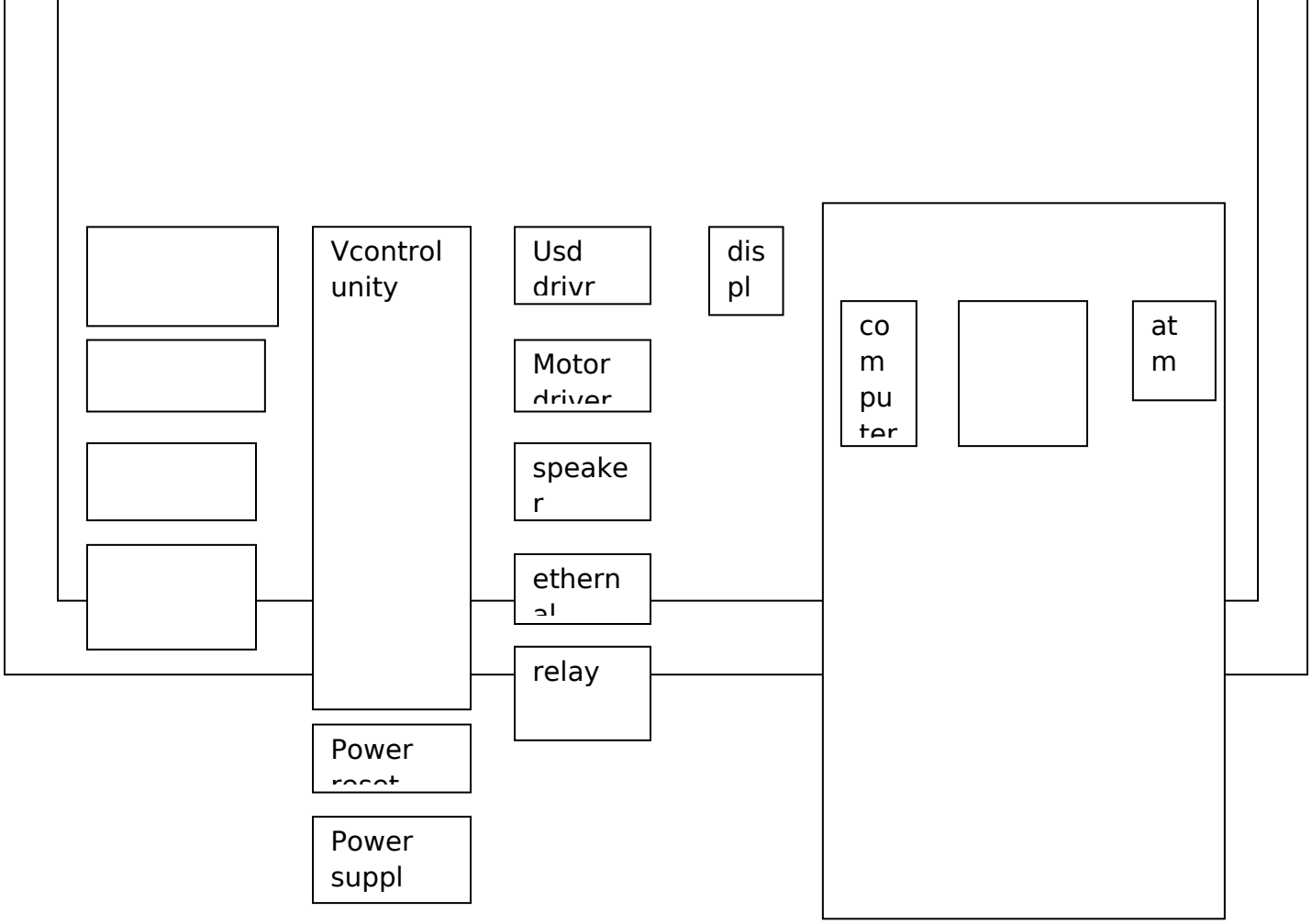


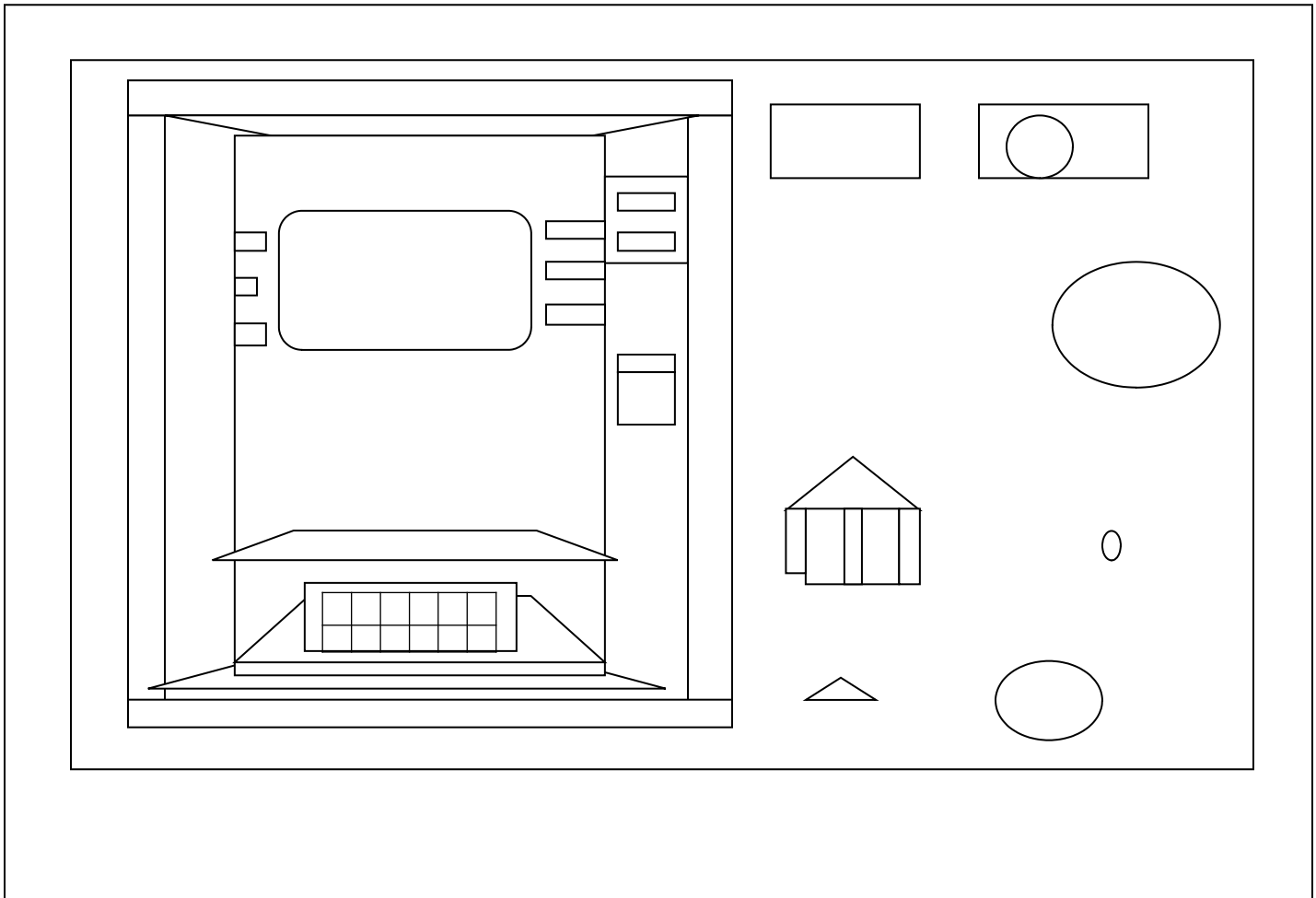

I+j a
I+ja

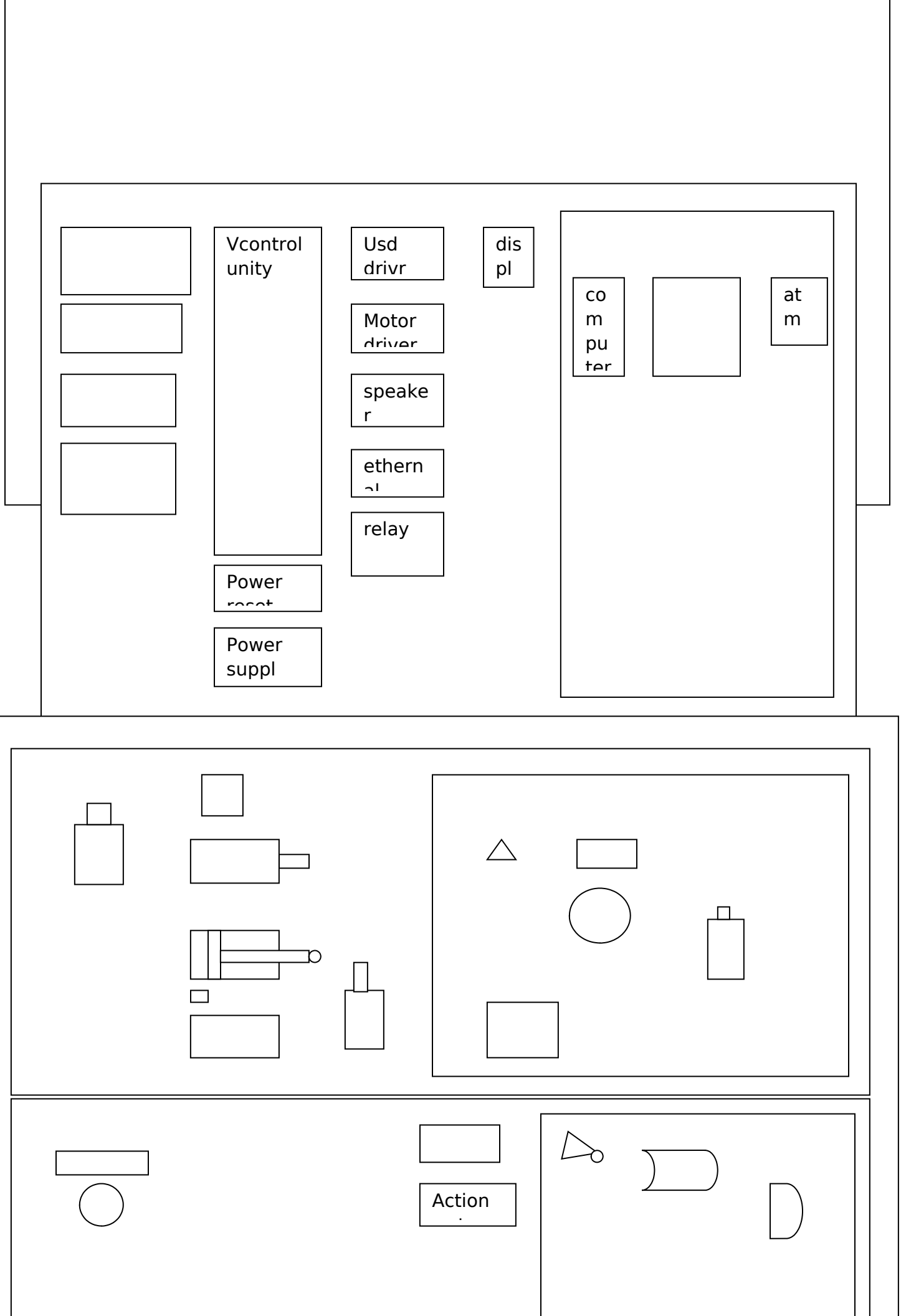

V1,v2,v3,, i1,i3,i3,,z1,z2,z3






Vcontrol
unity
Usd
drivr
dis
pl
Motor
driver
speake
r
ethern
al
relay
Power
reset
Power
suppl
co
m
pu
ter
at
m




Vcontrol unity
Usd drivr
dis pl
Motor driver
speake r
ethern al
relay
Power reset
Power suppl
co m pu ter
at m
Action

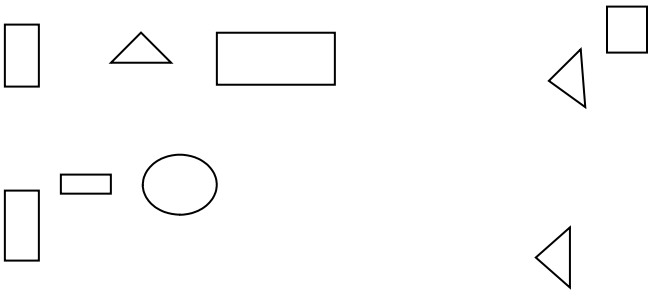
Temperature

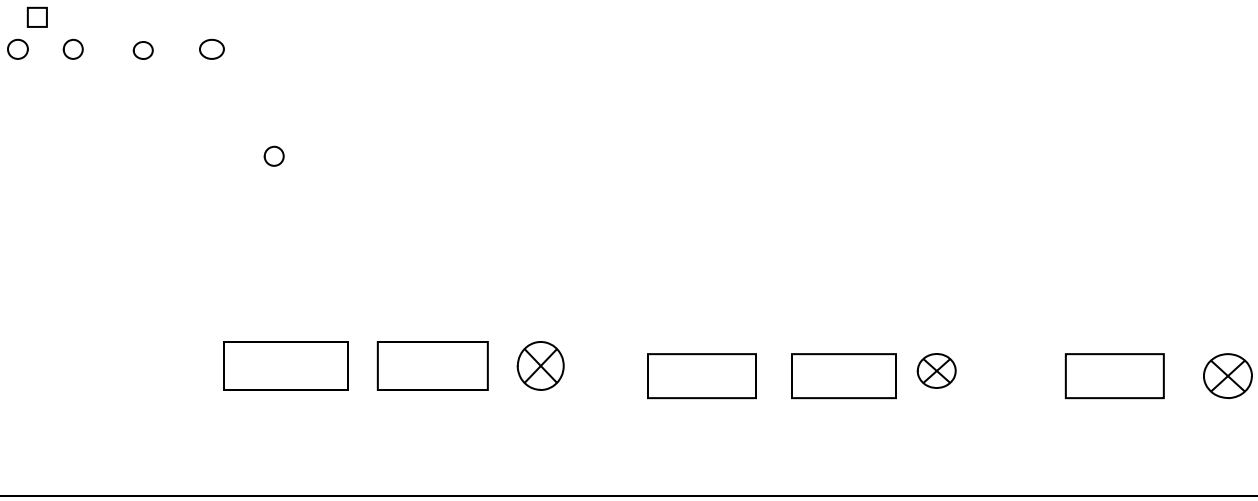
control

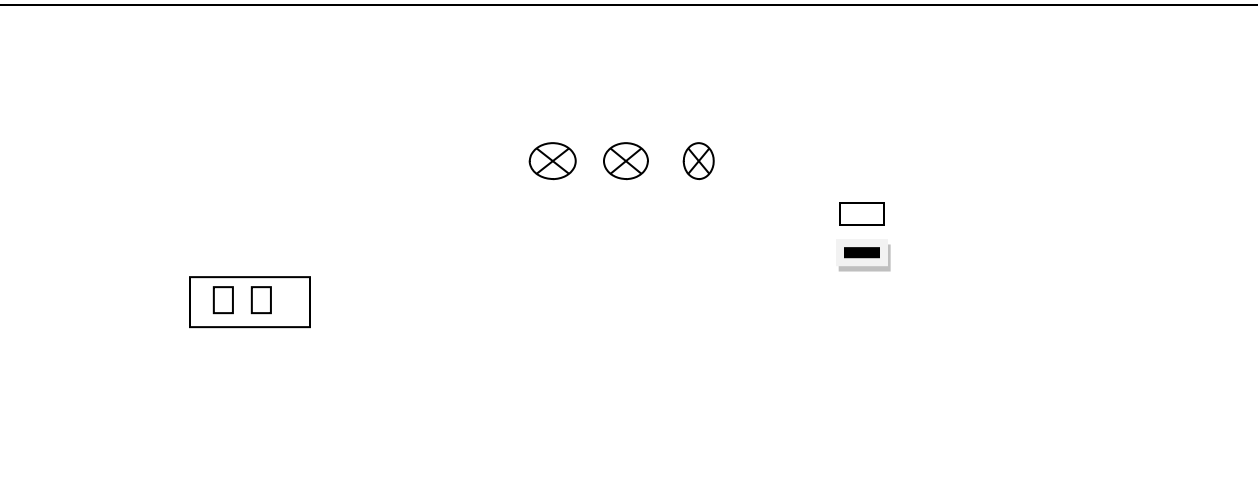
Output driver

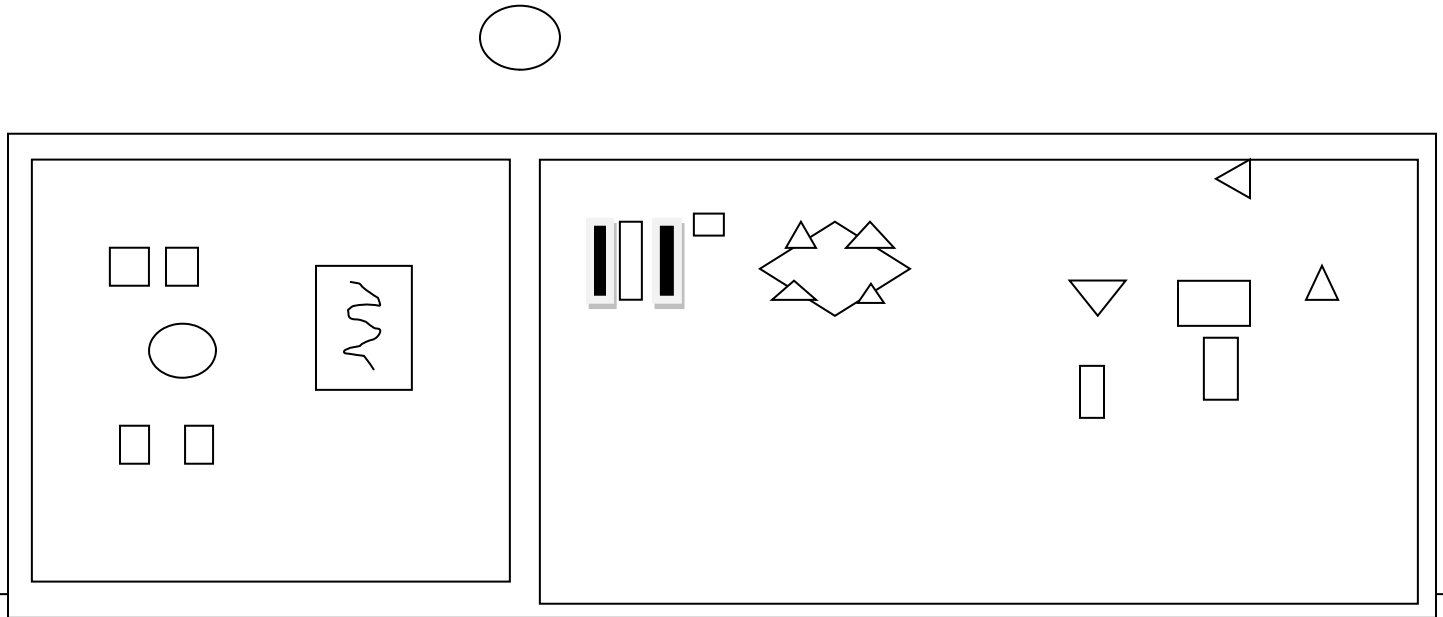
Eater counter

a	b	c	d				



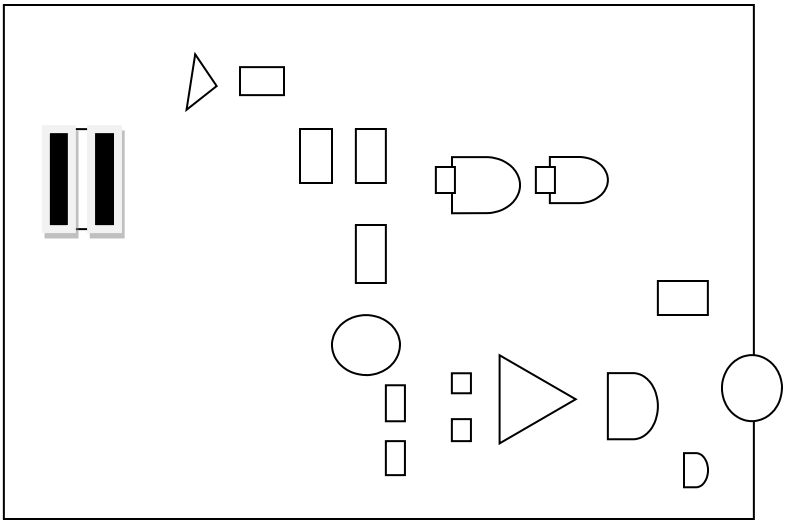


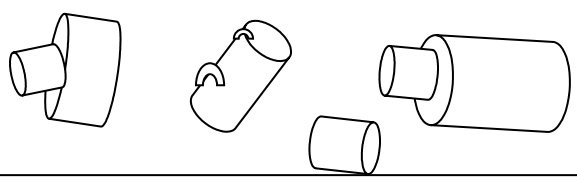


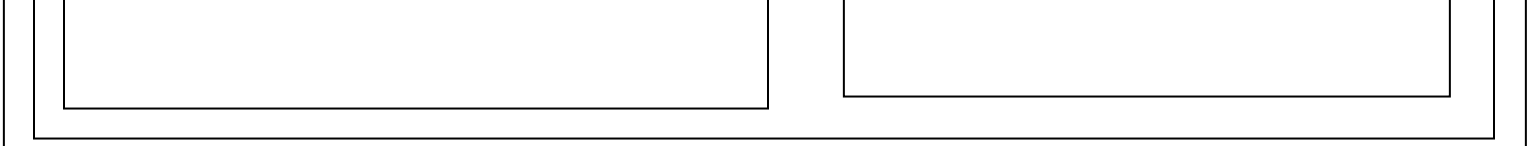


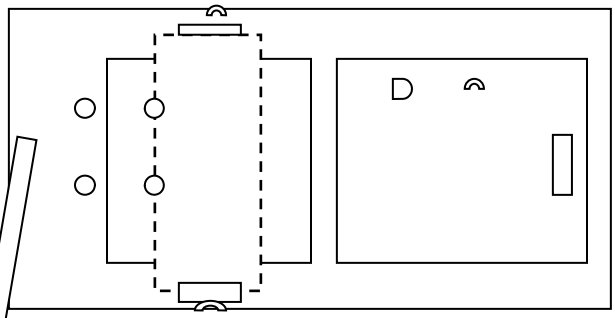
Input logic | Output logic

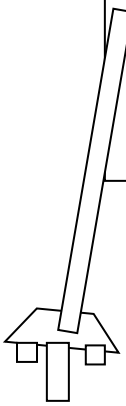
a	b	3	6 gate	8 gate	11 gate	
0	0					
0	1					
1	0					
1	1					

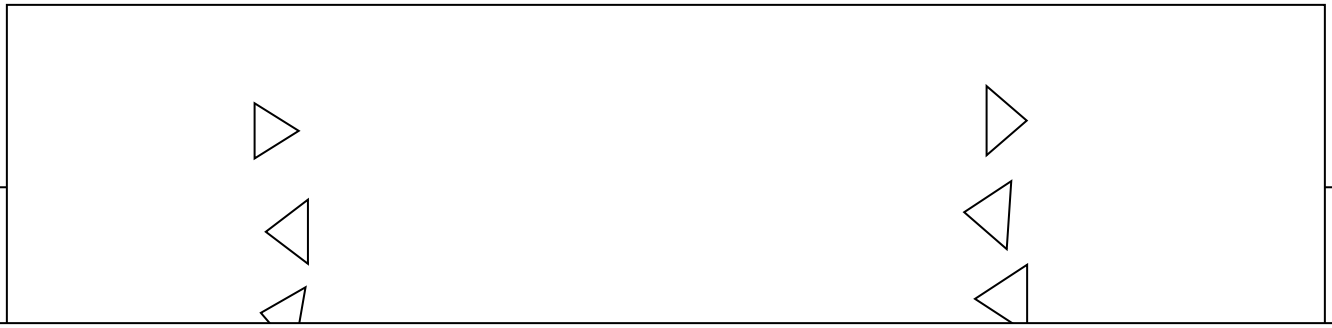


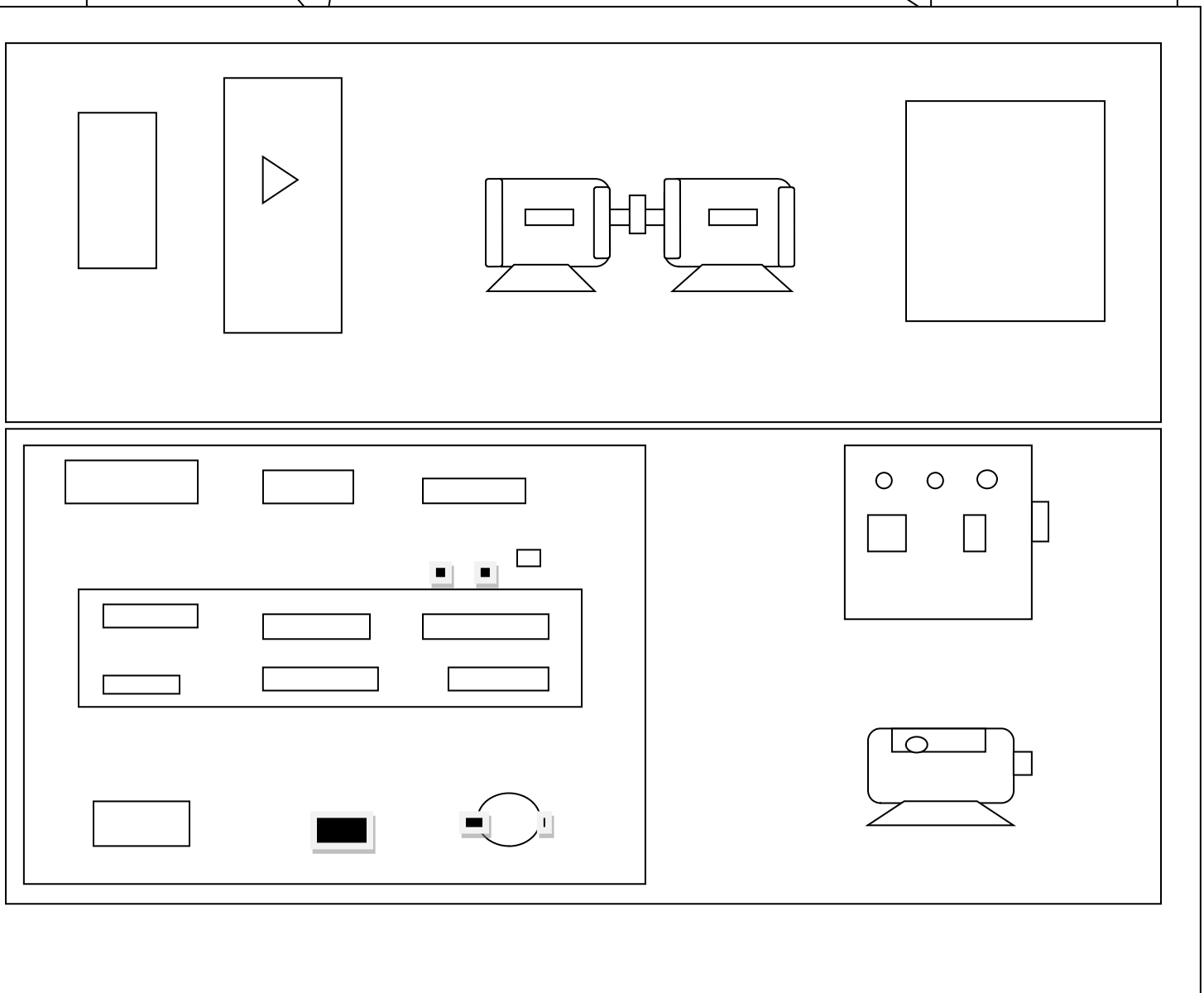


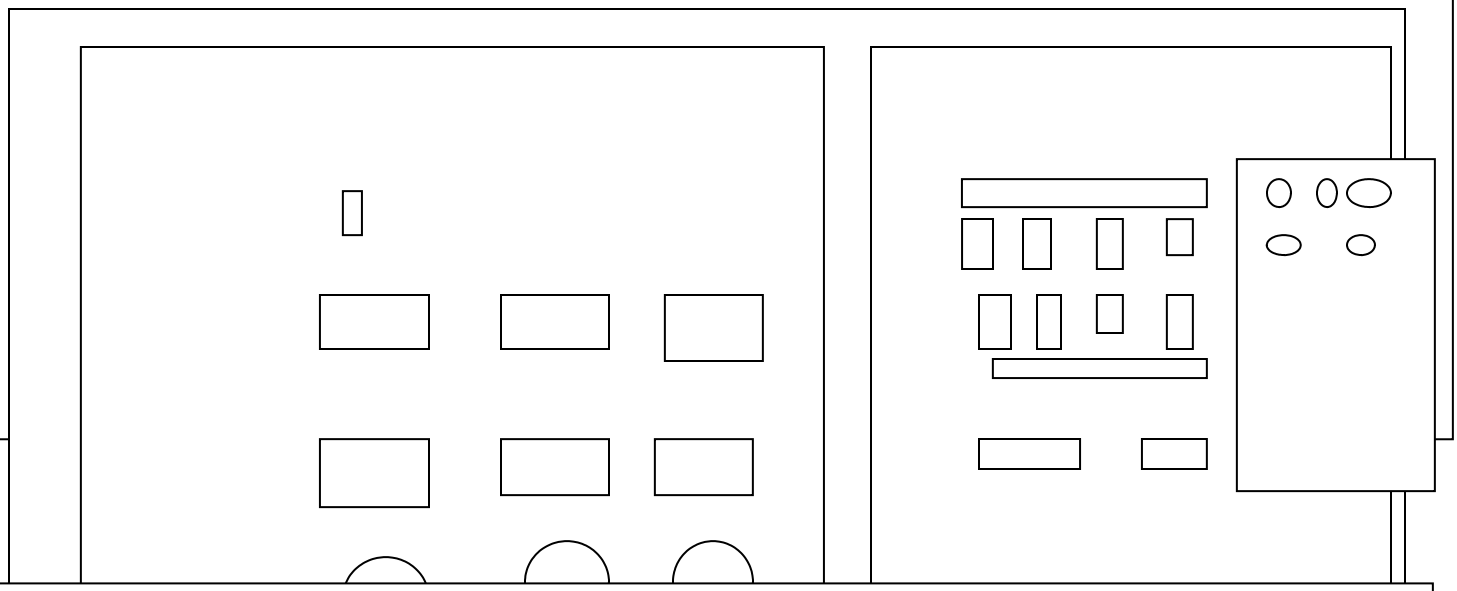


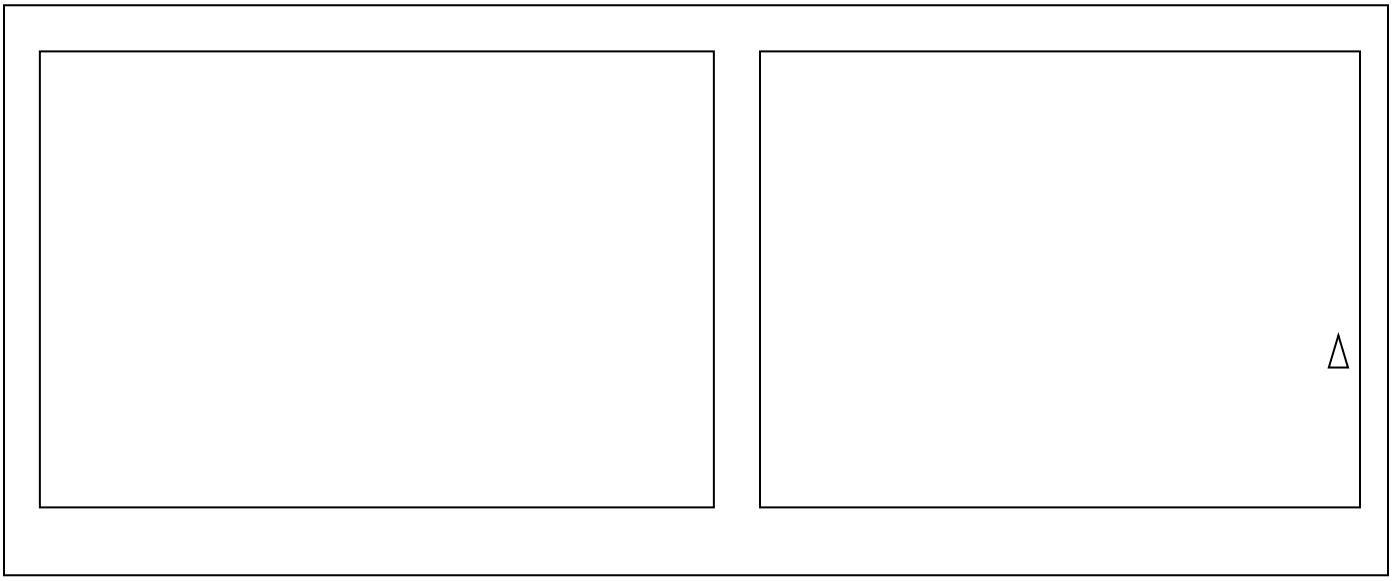




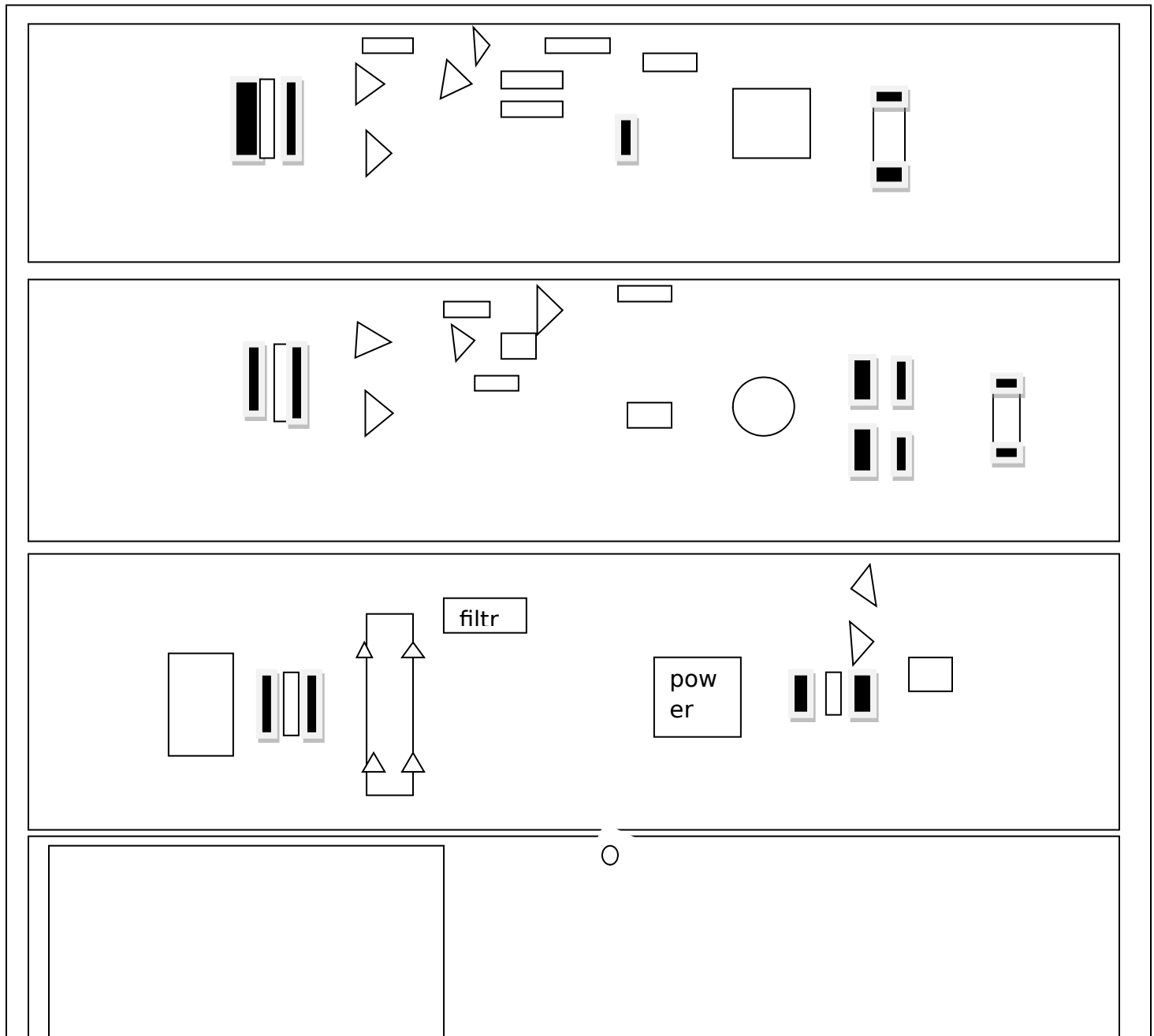


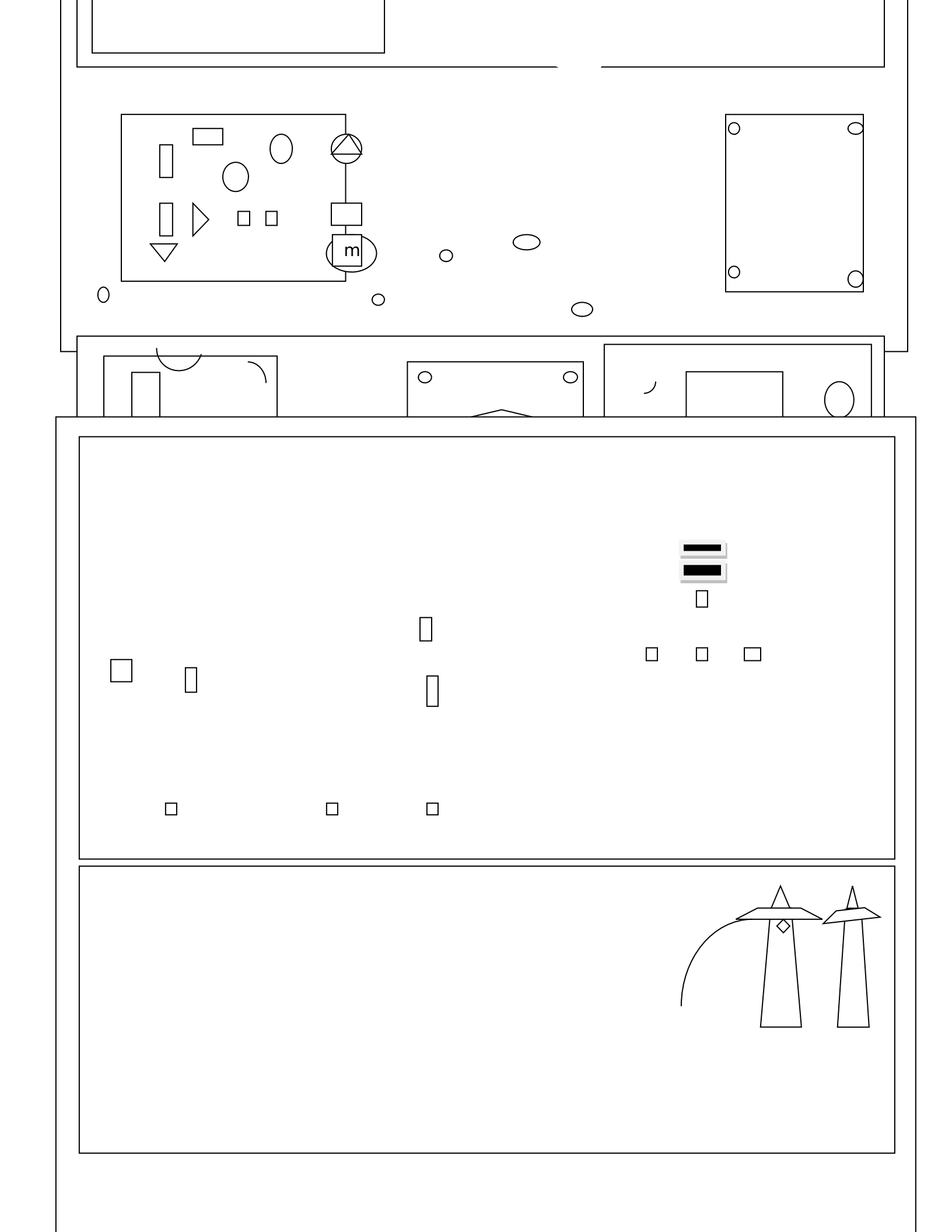


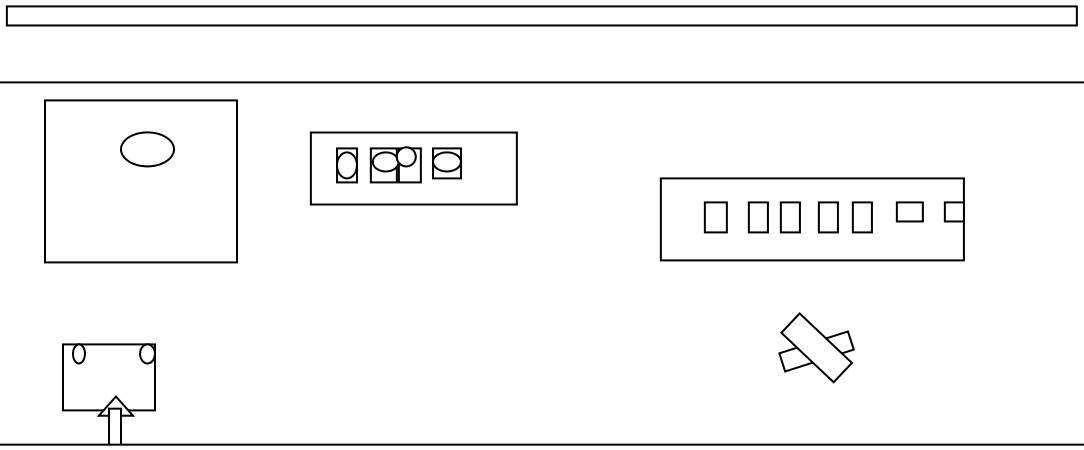


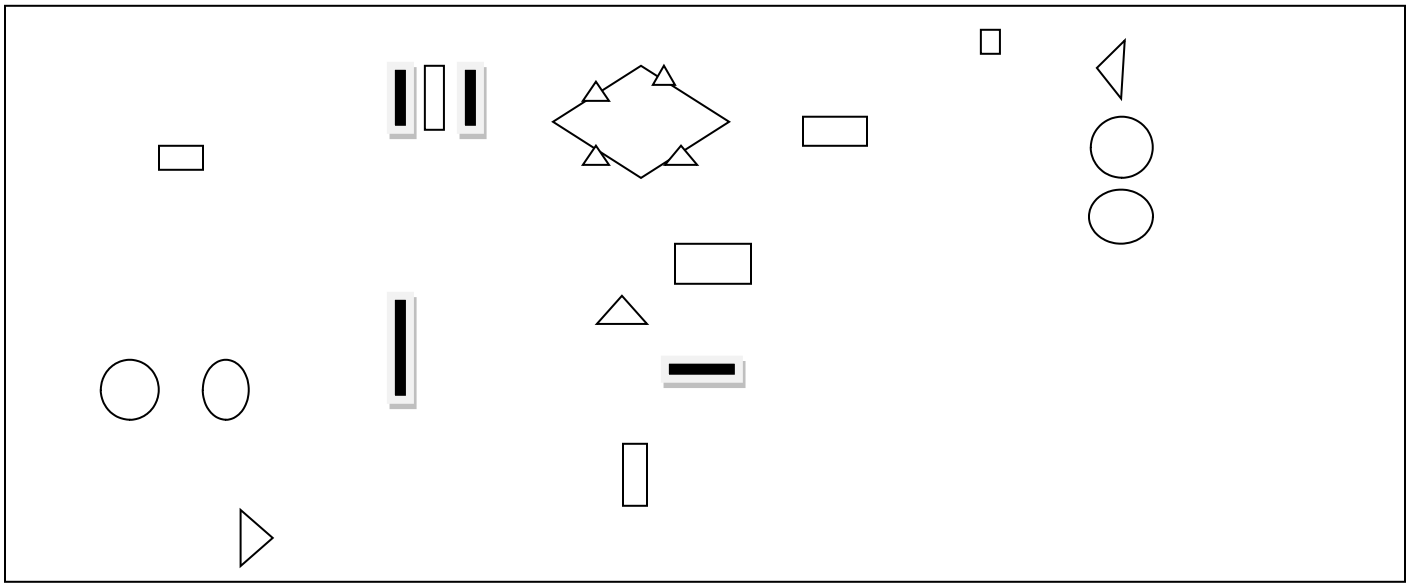


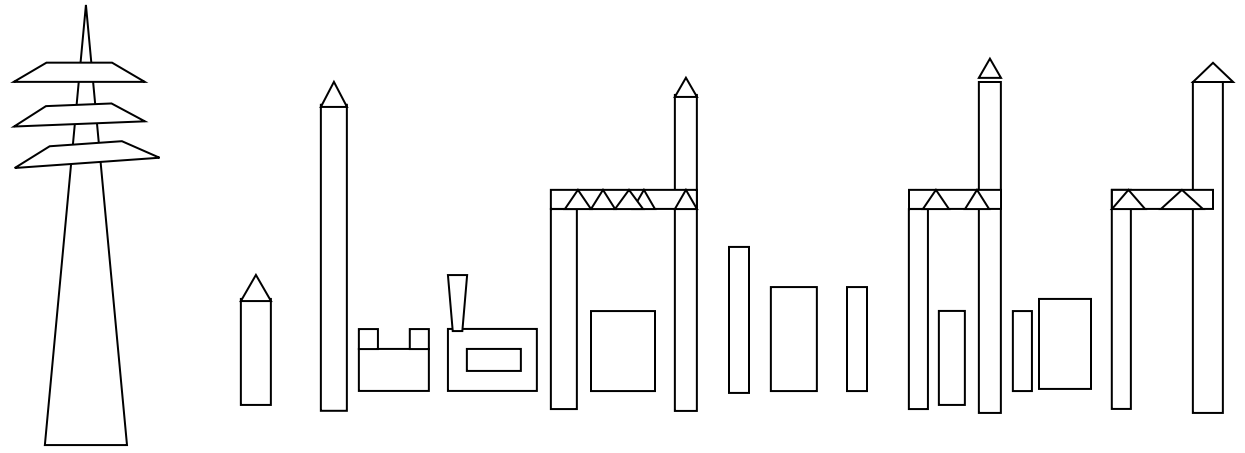
Requirement , tools instrument	Materials
Trane tools kit , scrket , ik	Push button , red , green , indicator holder , over load relay 0-15, 45, raceways , 1,5 sqm meter copper cabler , 650 , terminal connector , wire ferules , cube binder cabler shapes , nylon cable
Hacksaw frame with blade 300m ,hss drill bit 6 mm , 3 mm ,round nose plier 150m, crimping tools 200m ,	
- Instrument equipement , digital multimeter , megger 500v , contactor 4 ples , 16 a, 240 v, timer 1 numer relay	


filtr
pow
er


m



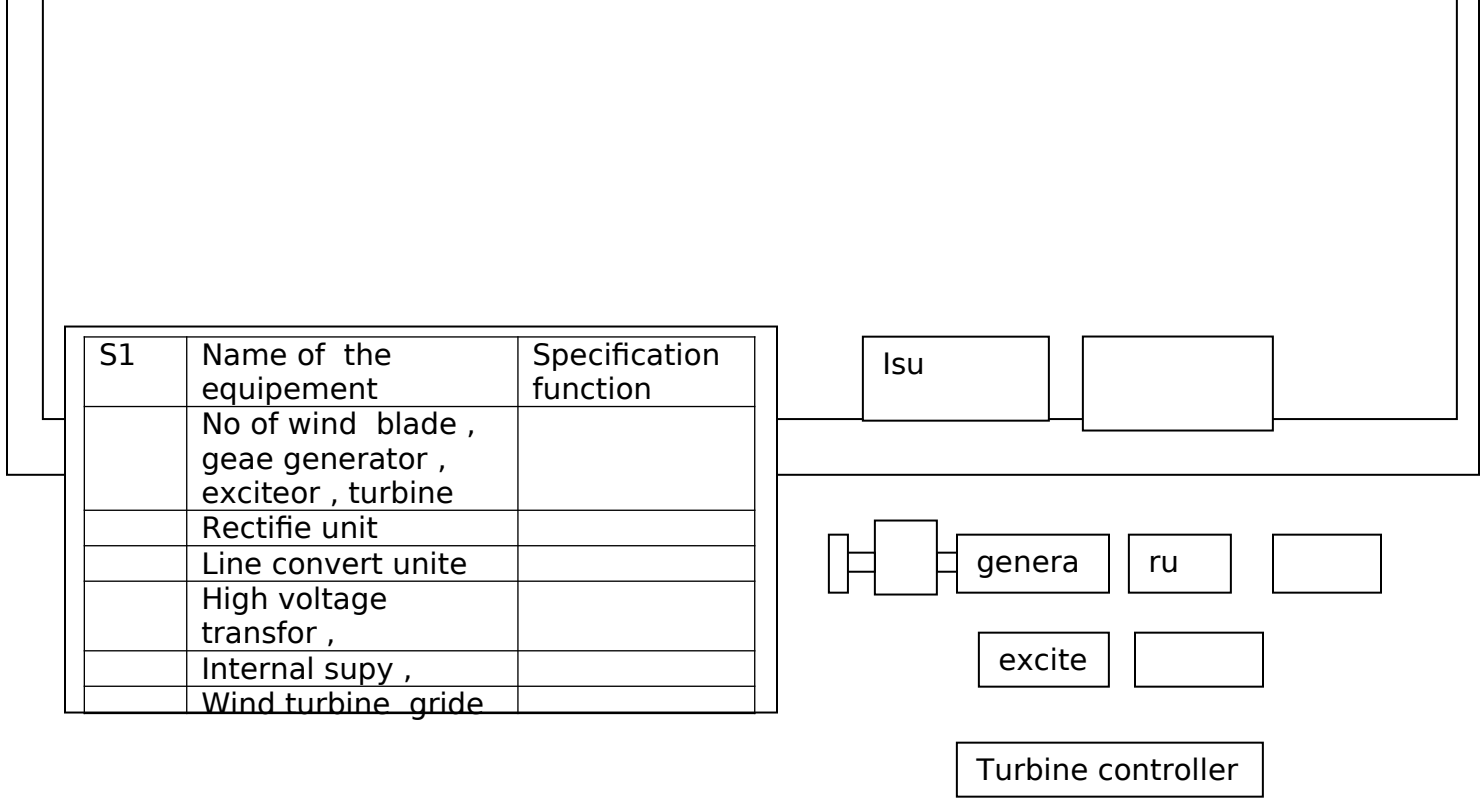




4, 3,,1.	5, 6	7,	5, 7,6,,8	9 ,8,

A, primary power line size, b . secondary power line size , 1 primary power line , ground wire, 3 overhead line, 7 current transformr , 8 ligthing arrested, 9 main transfo , potential,

S1	Name of the equipement	Specification function
	No of wind blade , geae generator , exciteor , turbine	
	Rectifie unit	
	Line convert unite	
	High voltage transfor ,	
	Internal supy ,	
	Wind turbine gride	



g

Appeal statement result .award degre diploma certificate n engineering studie

Inbox

t

tshingombe fiston <tshingombefiston@gmail.com>

Tue, Dec 26, 2023, 12:25 PM

to me, tshigombekb, maraba.a, lundt.s@dhet.gov.za, tena.m, lutuka.m, president, esther.rammultla, modiba.d, dmandaha, callcentre, careerhelp

Application

Ref :Applications letter number : 2023/1226

ADRESS:PRIVATE BAG X 174 ,PRETORIA 0001

123 FRANCIS BAARD STREET PRETORIA

TEL:0123235618

ENQUIRY NUMBER:

DHET :

DOCKET NUMBER :2023/1226

INFORMATION MANAGEMENT SYSTEM

- INSTITUT COLLEGE NAME :ST PEACE COLLEGE

-ID: NUMBER: TIRC0G000910610

-REGISTRATION NUMBER: STUDENT -CO70040101099

-SARS VAT NUMBER: 923228238

-MERSETA : 17_QA/ACC/1311/17

-SAQA REGISTRAR STUDENT NUMBER:210020223812,2004007064382.

-email adress: tshingombekb@gmail.com

-Alternate email address: tshingombefiston@gmail.com

APPEAL DECISSION RESULT RELEASE:

APPLICATION NUMBER:

Saqa: institut foreign .saqa transcription meeting 71638 dr congo requirements grasuate award diploma nqf .high certificate no meeting .leave school .expended assessments .exam d etat diploma .certificate professionek .certificate informatics mathematicsvoffics ; result outcom primaryb status registration saqa asset 09121 .saqa institut 30_ 39 nc assess policy.IE099 ,saqa id 67q0 certificate advance phase teach .n1 saqa id 63375.id 67491 entrance

 .n diplomat

-Qualification title national N diplomat engineering.

-nqf level:6 .

-date submitted to dhet :1105/2023

-date process .

DHET

-Timebtable /50111002

-N1:engineering studie

-ID:2004007064381

-ID:2100002023812

Dear .mr minister of education dhet and deputy member of dhet .tvet college examination directorat and authority competencies. Governments president

I' mr tshingombe tshitadi ;acknowledge student st peace college candidat examination career student follow course in duty of nated in rsa 2019 to 2024 , i 'm appear to your department goverment institution for allegation view no result of statement id candidat engineering n1.,n2, n,3,n4 ,n3 and n diplomat saqa outcom in irregularity final n5.n6 /nqf 6.

 examination national examination was not delivery in the time external assessments commited irregularities.

1.my motivation and disciplinairy assessment submitted my portofolio on line portal dhet release resultat statement and finalized award diplomat by examination commited irregularityb november invalide subject n3 trade theory electricakbtranscript the result of assessment was note release reson irregularity n3.subject n4 .subject fail druip result february 2022 .directorat assessment trascript material .statement affidavitsubmitted st peace college registrar shalom technical and afric instirut college no result outcom .after 15 days was result scaling n1.n2.n3but statement didint come out not print out by registrations resonement inconveniant. Arbitrary irregularity on february i submitted topics saqa qcto dhet email result of saqa documentation; filing dbe dhet .the commited was under investigation soon to finalyse .

2. I received to dhet committed assessment examinations irregularities the retain

, invalide subject 23 february 2022 the time table of n3 subject admnistration exam with those subject trade . electrical trade theory .4 subject november 2023 examination rhe result statement for last examination was not print outcome n1.n2 submited n3 last time table exam only last n4 exam statement print outcome and not time table for n6.,n5 received in examinations november suspension is 11 month for irregularity .follow tvet guideline assessment. Exam over the date insurence body frameworks qualification and labour department uif coud claim no outcom in career portal was outcom granted national fund skill for extra subject

topics irregularity rwiten qcto practical was not granted scope portal research qcto .

3.allegation result statement retain dhet .;saqa n diploma n diplomat application for n4.6 diplomat final was no granted n4.level 4 diploma icass years college in my portofolio submitted on line marked exam n5.n6.subject additional assessment information by institution isat icass.

Ref outcome saqa result

16 jan 2023 on line marischen masoga send submission number foreing instirut inquirie 9370.

Foreign institutions inquiries 6594

Section 29(a)policy criteria saqa nqf amanded march 2017 institut ...framework nqf foreign award must meet for recognise.

Saqa accepted only qualifications official examination body country ..external examination based , 26 july 2022.

4.allegation to qcto retain on ; saturday22 january 2022. ; with regard n certificate direction dhet education training (for n4_n6 n diploma or umalusi n3 can not assist with qcto issued

Sat ..10 march 203 qxto .certificate@qcto.org.za answer soc please note that the qcto does not issue any of results

-lindiwe grace 28 may 2023 inquire to national and assessment college .i have copied our QA unit they will be able to rspond to accorlingly regardc

Qcto khuluvhe labour market intelligences lmi esteemed stakeholder 21 aug 2023 was not grante

- i receiving Allegation to saqa retain on.10 march 2023 procedure for evaluatiin pro forma invoice .copy id passport.copy final award graduation certificate. Copy of completed transcript mark sheet academic record.proof payment if not meetings requirements can resubmitted again.non compliant; 27 july 2021 application above doe s not meet saqa

Final award school diploma degre certificate in 48h .

-that my requested letter to the authority minister for my result statement certificat over the date review n diploma 24 month.18 month nated examination to resolve problem after examination irregularities materiel that final result n4 and new re certificate body insurence investigation result center assessment outcome

years icass total tvet for my instirut st peace college institu and externsl certificate n1.n3 afric training institut and shalom technical collection print out was not in my application for diploma response from dhet submitted to resolve conflic assessment examination.

- your sincerly .

Sign :Tshingombe Tshitadi

_____

Appeal statement result .award degre diploma certificate n engineering studie

tshingombe fiston <tshingombefiston@gmail.com> Mon, Jan 8, 2024 at 11:46 AM

To: tshingombe fiston <tshingombefiston@gmail.com>, tshigombekb@gmail.com, maraba.a@dhet.gov.za, "lundt.s@dhet.gov.za" <lundt.s@dhet.gov.za>, tena.m@dhet.gv.za, lutuka.m@shet.go.za, president@presidency.gov.za, esther.rammultla@dst.gov.za, modiba.d@dhet.co.za, dmandaha@csir.co.za, callcentre@dhet.gov, careerhelp@dhet.gov.za

SUBJECTS	TERM1	TERM2	TERM3	TERM4	TOTAL
First Additional Language					
Life Orientation					
Mathematics or Mathematical Literacy					
Vocationel subject1					
Vocationel subject2					

Vocationel subject3 Vocationel subject4					
Total number task					

Business studie //

Final icass

SUBJECT ASSESSMENT PLAN

Subject name	Task assessment	Assessment tools	Topics subject outcom	Time mark allocation	examiner	Question submittd	Assessment date	Assesse mnt date	Memo discussion/ moderator mark
	test	**Marking**	**topics**	**1hr 50**					

		memo		**mark**					
	Assign ment	**Markin g memo checkli st**	**topi cs**	**75 mark**					
	Internal assessm ent			**100 mark**					
	Assign ment								
	test								

Task	Time frame	Type formal assessment	Scope assment	Mark allocation / contributed
1	**Term1**	**Formal test /oral Pratical aassement**	**Topic completed /**	**10%x7,, 20**
2	**Term2**			
3	**Term3**			

				100

FIRST ADDITIONAL LANGUAGES LANGUAGE: ……. LEVEL: …….												
YEAR: …… …… LECTURER: .. ……..			MARKS FOR ICASS TASKS									FINAL ICASS MARK
ICASS TASKS			Test1	Oral1	Functionalwriting	Test1	Oral1	Literature:Creative t	nternal Examination	CASSTOTAL(100	Competence Cod	Competence Cod
N	**Student id number**	**Student name /surname initial**	**Converted mark weigth%**									**1-7**
			100%									

FIRST ADDITIONAL LANGUAGES LANGUAGE: ……. LEVEL: …….		
YEAR: …… ……	MARKS FOR ICASS TASKS	FINAL ICASS

LECTURER: ..... ICASS TASKS											MARK	
			Test1	Oral1	Functionalwriting	Test1	Oral1	Literature:Creative t	nternal Examination	CASSTOTAL(100	Competence Cod	Competence Cod
N	**Student id number**	**Student name /surname initial**	**Converted mark weigth%**								**1-7**	
			100%									
YEAR: .... LECTURER: ..... ICASS TASKS			MARKS FOR ICASS TASKS								FINAL ICASS MARK	
			Test1	Oral1		Test1	Oral1		nternalExamination	CASSTOTAL(100	CompetenceCod	CompetenceCod
N	**Student id number**	**Student name /surname initial**	**Converted mark weigth%**								**1-7**	
			100%									

vocationel: ..... LEVEL:		
YEAR: ..... LECTURER:	MARKS FOR ICASS TASKS	FINAL ICASS MARK

RECORD SHEET FOR GENERAL - BUSINESS AND UTILITIES STUDIES

YEAR: ……SEMESTER: …… LECTURER:		FINAL ICASS MARK			
CLASS SEMESTER MARK SHEET		**Assignment**	**test**	**Internal exam**	
1	Student ID number/STUDENT SURNAME Student ID number / STUDENT SURNAME	**Converted mark weigth%** **20% / 30% / 50%**	**TOTAL 100%**		

TRIMESTER ASSESSMENT SCHEDULE FOR STUDENTS

Subjec	**Assessment Task**	**Assessment tool**	**Content Coverage**	**Duration and mark allocation**	
1					

TEMPLATE OF ICASS IRREGULARITY REGISTER

NAME OF COLLEGE	**SHALOM TECHNICAL**
CYCLE EXAM CYCLE & YEAR	

DATE	CENTRE NUMBER	CENTRE NAME	ID NUMBER	OFFER SUBJECT	LEVEL	ICASS TASK	MARK SHEET NUMBE	**Category of Irregularity as per irregularity form**	**Action taken**

ADMISSION PERMIT AND EXMINATION

TIME TABLE / 501110002, N1 ENGINEERING STUDIE N

EXAMINATION NUMBER / 2004007064381

CANDIDATE ID NUMBER : 2004007064381

TSHINGOMBE – TSHITADI / TSHITADI MAKANGU

EXAMINATION CENTRE / 899992880

AFRIC TRAINING CENTRE

F. SUBJECTS	PAPER	DATE	TIME
F8080641. INDUSTRIAL ELECTRONICS N1. EXTERNAL EXAMNINATION	**1**	**2020007 20**	**9.00**
F. 80902661. ENGINEERING DRAWING N1 . . EXTERNAL EXAMNINATION	**1**	**2020078**	**9.00**
F.110418161. ELECTRICAL TRADE THEORY N1. . EXTERNAL EXAMNINATION	**1**	**2020071 7**	**9.00**
F. 16030121. MATHEMATIC N1. EXTERNAL EXAMINATION . . EXTERNAL EXAMNINATION	**1**	**2020007 21**	**9.00**
RE. MARKING APPLICATION FOR RE – MARKING			

ADMISSION PERMIT AND EXMINATION

TIME TABLE / 501110002, N3

ENGINEERING STUDIE , N

EXAMINATION NUMBER / 2100002023812

CANDIDATE ID NUMBER : 2100002023812

TSHINGOMBE – TSHITADI / TSHITADI MAKANGU

EXAMINATION CENTRE / 899992880

AFRIC TRAINING CENTRE

F. SUBJECTS	PAPER	DATE	TIME
F8080641. INDUSTRIAL ELECTRONICS N1. EXTERNAL EXAMNINATION F.110418161 . ELECTRICAL TRADE THEORY N1. EXTERNAL EXAMNINATION F. 16030121. MATHEMATIC N1. EXTERNAL EXAMINATION . . EXTERNAL EXAMNINATION	**1** **1** **1**	**20200011 25** **20200112 9** **20200011 26**	**9.00** **9.00** **9.00**
RE. MARKING APPLICATION FOR RE – MARKING			

N/ 2 REPLACEMENT TRAINING SUBMISSION PRACTICLA LEVEL 2

ADMISSION PERMIT AND EXMINATION

TIME TABLE / 501110002, N3 ENGINEERING STUDIE N

EXAMINATION NUMBER / 2100002023812

CANDIDATE ID NUMBER : 2100002023812

TSHINGOMBE – TSHITADI / TSHITADI MAKANGU

EXAMINATION CENTRE / 899993812

SHALOM TECHNICAL

F. SUBJECTS	PAPER	DATE	TIME
F80806413. INDUSTRIAL ELECTRONICS N3. EXTERNAL EXAMNINATION F.11041263. ELECTRICAL TRADE THEORY N3. . EXTERNAL EXAMNINATION F.15070413 .ENGINEERING SCIENCE N3. EXTERNAL EXAMINATION F. 16030142. MATHEMATIC N3. EXTERNAL EXAMINATION . . EXTERNAL EXAMNINATION	**1** **1** **1** **1**	**20210819** **20210825** **20210820** **20210823**	**9.00** **9.00** **9.00** **9.00**
RE. MARKING APPLICATION FOR RE – MARKING			

ADMISSION PERMIT AND EXMINATION

TIME TABLE / 501110002, N1 ENGINEERING STUDIE N

EXAMINATION NUMBER / 2004007064381

CANDIDATE ID NUMBER : 2004007064381

TSHINGOMBE – TSHITADI / TSHITADI MAKANGU

EXAMINATION CENTRE / 899992880

AFRIC TRAINING CENTRE

F. SUBJECTS	PAPER	DATE	TIME
F80800074. ELECTROTECHNICS N4. EXTERNAL EXAMNINATION	**1**	**20220201**	**9.00**
F. 8080164. INDUSTRIAL ELECTRONICS N4 . EXTERNAL EXAMNINATION	**1**	**20220208**	**9.00**
F.15070434. ENGINEERING SCIENCE N4. . EXTERNAL EXAMNINATION	**1**		**9.00**
F. 16030164. MATHEMATIC N4. EXTERNAL EXAMINATION . . EXTERNAL EXAMNINATION	**1**	**20220207**	**9.00**
		20220202	
RE. MARKING APPLICATION FOR RE – MARKING			

DHET / RSA

ADMISSION PERMIT AND EXMINATION

TIME TABLE / 501110002, N3 ENGINEERING STUDIE N

EXAMINATION NUMBER / 2100002023812

CANDIDATE ID NUMBER : 2100002023812

TSHINGOMBE – TSHITADI / TSHITADI MAKANGU

EXAMINATION CENTRE / 899993812

SHALOM TECHNICAL

F. SUBJECTS	PAPER	DATE	TIME
F . 4110033. INDUSTRIAL ORIENTATION N3. EXTERNAL EXAMNINATION	**1**	**20231129**	**9.00**
F.11040023. PLANT OPERATION N3 . EXTERNAL EXAMNINATION	**1**	**20231129**	**9.00**
F.11040343 .ELECTROTECHNOLOGY . N3. EXTERNAL EXAMINATION	**1**	**20231206**	**9.00**
F. 11041263. ELECTRICAL TRADE THEORY N3. EXTERNAL EXAMINATION . . EXTERNAL EXAMNINATION	**1**	**20231128**	**9.00**
RE. MARKING APPLICATION FOR RE – MARKING			

DHET / RSA

N4: ENGINEERING STUDIES/ NOVEMBER 2021

EXAMINATION NUMBER : 210000203812 **1982/11/10**

STATEMENT OF RESULTAT

INSTRUCTIONAL OFFERING	%	RESULT
80800074. ELECTROTECHNICS N4	**18**	**FAIL DRUIP**
8080164. INDUSTRIAL ELECTRONICS N4	**19**	**FAIL DRUIP**
15070434. ENGINEERING SCIENCE N4.	**35**	**FAIL DRUIP**
. 16030164. MATHEMATIC N4	**29**	**FAIL DRUIP**

RESULT CODE APPEAR ON REVERSE SIDE

2021/12/01

EXAMINATION OFFICER 5563

DEPARTMENT THE RIGTH TO EFFECT CHANGE TO THIS DOCUMENT IS NECESSAIRES .

DHET / RSA

N1: ENGINEERING STUDIES/ NOVEMBER 2021

EXAMINATION NUMBER : 210000203812 1982/11/10

STATEMENT OF RESULTAT

INSTRUCTIONAL OFFERING	%	RESULT

RESULT CODE APPEAR ON REVERSE SIDE

2021/12/01

EXAMINATION OFFICER 5563

DHET / RSA

N3: ENGINEERING STUDIES/ NOVEMBER 2021

EXAMINATION NUMBER : 210000203812 1982/11/10

STATEMENT OF RESULTAT

INSTRUCTIONAL OFFERING	%	RESULT

RESULT CODE APPEAR ON REVERSE SIDE

2021/12/01

EXAMINATION OFFICER 5563

TIME TABLE: ADM EXAM

INTERNAL ST PEACE COLLEGE INTERNAL TEST CLASS WORK FINAL ASSESSMENT EXANT

STATEMENT OF RESULTAT /

RESULT :

RESULT SCALE WEIGHT RE-MARKER

100% ANSWER

SHOORT, MEDUIM , MARKING / SPOUNTER / .. SPONGER / , PANDY,

RESULT:

ASSESSMENT CENTER IRREGULARIRTY :

F FULL P INVALIDE SUBJECT , 23 FEBRUART 2023 , 2021 NOVEMBER 1036 REF:

IRREGULARITY DECISSION BASED FINALISED , FAIL ADDED INFORMATION AS SOON IT FINALISED

SAQA

RESULT

EVALUATION OF FOREIGN QUALIFICATION TEAM : FINAL AWARD DEGREE DIPLOMA CERTIFICATE ,

SUBMITTED SCREEN DATE , 14/11/2019 ..

- **INTERNATIOAL DEGREE QUALIFICATION RECOMMANDE NOTE ,**

AWARD SAQA MEET REQUIRENT SCHOOL LEAVERS:

ST EACE COLLEGE INTERNAL ASSESSMENT :

DHET / RSA

ADMISSION PERMIT AND EXMINATION

TIME TABLE / 501110002, N3 ENGINEERING STUDIE N

EXAMINATION NUMBER / 2100002023812

CANDIDATE ID NUMBER : 2100002023812

TSHINGOMBE – TSHITADI / TSHITADI MAKANGU

EXAMINATION CENTRE /

ICASS TEST , CLASSWORK MMORENDUM , ISAT

PRACTICAL TRADE / PANEL ELECTRICAL WIRING

-AWARD : CERTIFICATE : CERTIFICATE N0:

31-10-2020

COM 182609001/

CRITERIAT

ICASS

MARK FINAL 80% CALCULATION :

80%+0,4=32 FINAL

32+21= 53 PASS

ICASS MARK 45 %

45%.04+18 EXAM MARK , 29%X0= PASSED

17,4 AND FINAL , 18+17,4 =35

JAN 2023 MARK ADDITIONAL ASSEMENT MAY USED CALCULA ,

20/30+0/70=200/100

CALCULATION FINAL ICASS ,

19+0,4=

	MARK FINAL 80% CALCULATION : **80%+0,4=32 FINAL** **32+21= 53 PASS** **ICASS MARK 45 %** **45%.04+18 EXAM MARK , 29%X0= PASSED** **17,4 AND FINAL , 18+17,4 =35** **JAN 2023 MARK ADDITIONAL ASSEMENT MAY USED CALCULA ,** **20/30+0/70=200/100** **CALCULATION FINAL ICASS ,** **19+0,4=**
	20+0.4= **29+0,4=** **30+0,4=** **19% X 0,6=11,4** **20% X 0,6=17,7** **30 X 0,6=18** **TVET YEARS SEMMESTER FINAL / SUBMISSION N4-N5, N6,N3 , N DIPLOMAT N STUDIE SUBMISION CERTIFICATE YEARS CLOSE YEARS BASE//** **2022 IRREGULARITY ADDIDTIONAL** **11,4+50=66,4%** **12,50=66,5%** **17,7+50+77,50%** **18+50+68,8%**

BOOK SHALOM TECHNICAL RELEASE RESULTAT PROGRESS MARKING ASSESSMENT

, VERIFICATION

TIME TABLE: ADM EXAM /

CONTINUE ASSESSMENT 2023 IN PROGRESS

N5,N6 / RE- RWITEN N3

STATEMENT : ENGINEERING BUSINESS

AFRICA TRAINING INSTITUT EXTERNAL ASSESMENT

STATEMENT OF RESULTAT N1

INTRUCTION OFFER	%	RESULT

TEST 1/TEST2 80 / CLASS WORK / SUBMISSION TOPICS ,

PREVIOUSE MEMO LAST PAPPERS

LEVEL COMPLETED WEEK 80% WORD / 3000MARKS

MODULES WEIGTH SCALE

STATEMENT OF RESULTAT N2 REPLACEMENT

INSTRUCTION OFFER	%	RESULT

TEST 1/TEST2 80 / CLASS WORK / SUBMISSION TOPICS ,

PREVIOUSE MEMO LAST PAPPERS

LEVEL COMPLETED WEEK 80% WORD / 3000MARKS

STATEMENT OF RESULT

N 5 FINAL /

INSTRUCTION OFFER	%	RESULT

TEST 1/TEST2 80 / CLASS WORK / SUBMISSION TOPICS ,

PREVIOUSE MEMO LAST PAPPERS

LEVEL COMPLETED WEEK 80% WORD / 3000MARKS

PRACTICAL PLUMBING

STATEMENT OF RESULTAT/ FINAL N6

	%	RESULT

TEST 1/TEST2 80 / CLASS WORK / SUBMISSION TOPICS ,

PREVIOUSE MEMO LAST PAPPERS

LEVEL COMPLETED WEEK 80% WORD / 3000MARKS

TOPIC ACHIEVEMNT / RATING

ICASS / REMARK FINAL

STATEMENT EXTERNAL / SHALOM TECHNICAL EXTERNAL COMPARE

STATEMENT OF RESULT

STUDIE ENGINEERING N3

STATEMENT OF RESULTAT N4

ACHIEVENT AWARD ,

CERTIFICATE

DIPLOMA AWARD / RELESE ACHEVEMENT CERTIFICATE ,, HOD FILE LECTURE ,,

APPLICATIO

,N4,N3, N5,N6, EXPERIMENTAL WORKPLACE , AWARD DIPLOMA CAREER

VERIFICATION CAREER JOB

JOB SCORE

RELEASE COMPARE ,, OUTCOM , SCOPE SAQA RESULT EXPERIMENTAL

EVIDENCE LOW_BODY INSURANCE_OCCUPATION_FRAMEWORK_

QCTO RESULT TRADE_RELEASE_

RESEARCH_RESULTAT_POE'S RESULT_TOPICS_ACHIEVEMENT_

TOPICS PRACTICAL RESULTAT CERTIFICATE :

RELEASE RE – CERTIFICATION N4,N5,N6 INSURANCE BODY ,, SAQA QCTO

CPD DEVELOPMENT SAQA AWARD MEEETING

COUNCIL TRDE , COUNCIL ENGINEERING , EXPERIMENTAL, COUNCIL :

REF: CHIEF DIRECTORATE: NATIONAL EXAMINATIONS AND ASSESSMENT
Private Bag X110, Pretoria, 0001, South Africa, 123 Francis Baard Street, PRETORIA, 0002.
Tel: +27 12 357 3892, Fax: 012 328 6878, http://www.dhet.gov.za

Enquiries: Pierre de Villiers
Tel.: (012) 357 3966 / 082 697 0982
Email: devilliers.p@dbe.gov.za
TO: CAMPUS MANAGERS
ACADEMIC HEADS
EXAMINATION OFFICERS
DEPUTY PRINCIPALS: ACADEMIC
PRINCIPALS OF PUBLIC TVET COLLEGES AND PRIVATE COLLEGES
SOUTH AFRICAN COLLEGE PRINCIPALS' ORGANISATION (SACPO)
REGIONAL DIRECTORS/ MANAGERS
UMALU

MEMORANDUM TE50 OF 2016
RELEASE OF 201608 RESULTS
1. RELEASE OF 201608 ENGINEERING STUDIES EXAMINATION RESULTS
The quality assurance bodies responsible for TVET College qualifications approved the release of the August
2016 examination results for Report 190/1 Engineering Studies. These schedules of results were subsequently
released to examination centre

The results for the one subject listed below (Table 1.1) were not standardised and published due to low capture
rates and will be released later this week once all outstanding marks are received from examination centres. The
results for this subject currently reflect as UNDER INVESTIGATION

SUBJECT CODE	SUBJECT	LEVEL	RESON	
N3	ELECTRICAL TRADE THEORY	N3	UNDER INVESTIGATIO N	

trade-related qualifications design, assessment, and quality assurance. Models are developed based on international best practice, and developments, both in current practice and in terms of the future world of work, are investigated and analyse

On Tue, Dec 26, 2023 at 12:25 PM tshingombe fiston <tshingombefiston@gmail.com> wrote:
Application
Ref :Applications letter number : 2023/1226
_____
ADRESS:PRIVATE BAG X 174 ,PRETORIA 0001
123 FRANCIS BAARD STREET PRETORIA
TEL:0123235618
_____
ENQUIRY NUMBER:
DHET :
DOCKET NUMBER :2023/1226
INFORMATION MANAGEMENT SYSTEM
- INSTITUT COLLEGE NAME :ST PEACE COLLEGE
-ID: NUMBER: TIRC0G000910610
-REGISTRATION NUMBER: STUDENT -CO70040101099
-SARS VAT NUMBER: 923228238
-MERSETA : 17_QA/ACC/1311/17
-SAQA REGISTRAR STUDENT NUMBER:210020223812,2004007064382.
-email adress: tshingombekb@gmail.com
-Alternate email address: tshingombefiston@gmail.com

tshingombe fiston <tshingombefiston@gmail.com>

Appeal statement result .award degre diploma certificate n engineering studie

tshingombe fiston <tshingombefiston@gmail.com> Tue, Mar 12, 2024 at 2:50 PM

To: tshingombe fiston <tshingombefiston@gmail.com>, tshigombekb@gmail.com, maraba.a@dhet.gov.za, lundt.s@dhet.gov.za, tena.m@dhet.gv.za, lutuka.m@shet.go.za, "President Hotline(DPME)" <president@presidency.gov.za>, esther.rammultla@dst.gov.za, modiba.d@dhet.co.za, dmandaha@csir.co.za, callcentre@dhet.gov, careerhelp@dhet.gov.za, confirmations@saqa.co.za, verification@qcto.org.za, dfqeas@saqa.co.za, saqainfo@saqa.org.za, verifications@saqa.co.za, sonnika.lund.s@dhet.gov.za

On Tue, 27 Feb 2024, 10:14 tshingombe fiston, <tshingombefiston@gmail.com> wrote:

On Thu, Feb 15, 2024 at 10:23 AM tshingombe fiston <tshingombefiston@gmail.com> wrote:

Application

Ref: Applications letter number: 2023/1226

_____

ADRESS: PRIVATE BAG X 174, PRETORIA 0001

123 FRANCIS BAARD STREET PRETORIA

TEL: 0123235618

_____

ENQUIRY NUMBER:

DHET:

DOCKET NUMBER: 2023/1226

INFORMATION MANAGEMENT SYSTEM

- INSTITUT COLLEGE NAME: ST PEACE COLLEGE

-ID: NUMBER: TIRC0G000910610

-REGISTRATION NUMBER: STUDENT -CO70040101099

-SARS VAT NUMBER: 923228238

-MERSETA: 17_QA/ACC/1311/17

-SAQA REGISTRAR STUDENT NUMBER: 210020223812, 2004007064382.

-email address: tshingombekb@gmail.com

-Alternate email address: tshingombefiston@gmail.com

APPEAL DECISSION RESULT RELEASE:

APPLICATION NUMBER:

Saga: institute foreign .saga transcription meeting 71638 dry Congo requirements graduate award diploma knife .high certificate no meeting .leave school .expended assessments .exam d teat diploma .certificate professional .certificate informatics mathematic vs. offices ; result outcome primary status registration saga asset 09121 .saqa institute 30_ 39 no assess policy.IE099 ,saqa id 67q0 certificate advance phase teach .n1 saqa id 63375.id 67491 entrance

.n diplomat

-Qualification title national N diplomat engineering.

-nqf level:6 .

-date submitted to dhet :1105/2023

-date process.

DHET

-Timetable /50111002

-N1: engineering studies

-ID: 2004007064381

-ID: 2100002023812

Dear .mar minister of education duet and deputy member of duet .vet college examination directorate and authority competencies. Government’s president

I' mar tshingombe tshitadi ;acknowledge student st peace college candidate examination career student follow course in duty of nated in rsa 2019 to 2024 , i 'm appear to your department goverment institution for allegation view no result of statement id candidat engineering n1.,n2, n,3,n4 ,n3 and n diplomat saqa outcom in irregularity final n5.n6 /nqf 6.

Examination national examination was not delivery in the time external assessments commited irregularities.

1.my motivation and disciplinary assessment submitted my portfolio on line portal duet release resultant statement and finalized award diplomat by examination committed irregularity November invalided subject n3 trade theory electricakbtranscript the result of assessment was

note release reason irregularity n3.subject n4 .subject fail druip result February 2022 .directorate assessment transcript material .statement affidavit submitted sty peace college registrar shalom technical and agric institute college no result outcome .after 15 days was result scaling n1.n2.n3but statement didn't come out not print out by registrations resentment inconvenient. Arbitrary irregularity on February I submitted topics saga cot dhet email result of saqa documentation; filing dbe dhet .the committed was under investigation soon to finalize.

2. I received to duet committed assessment examinations irregularities the retain

, invalided subject 23 February 2022 the time table of n3 subject administration exam with those subject trade. electrical trade theory .4 subject November 2023 examination rhea result statement for last examination was not print outcome n1.n2 submitted n3 last time table exam only last n4 exam statement print outcome and not time table for n6.,n5 received in examinations November suspension is 11 month for irregularity .follow vet guideline assessment. Exam over the date insurance body frameworks qualification and labor department if could claim no outcome in career portal was outcome granted national fund skill for extra subject topics irregularity written cot practical was not granted scope portal research cot .

3.allegation result statement retain duet .;saga n diploma n diplomat application for n4.6 diplomat final was no granted n4.level 4 diploma ices years college in my portfolio submitted on line marked exam n5.n6.subject additional assessment information by institution is at ices.

Ref outcome saga result

16 Jan 2023 on line maraschino massage send submission number foreign institute inquiries 9370.

Foreign institutions inquiries 6594

Section 29(a) policy criteria saga knife amended march 2017 institute ...framework nqf foreign award must meet for recognize.

Saqa accepted only qualifications official examination body country...external examination based, 26 July 2022.

4. Allegation to qcto retain on; saturday22 January 2022. ; With regard n certificate direction dhet education training (for n4_n6 n diploma or umlauts n3 can not assist with qcto issued

Sat ..10 march 203 l .certificate@qcto.org.za answer soc please note that the qcto does not issue any of results

-lindiwe grace 28 may 2023 inquire to national and assessment college .i have copied our QA unit they will be able to rspond to accorlingly regardc

Qcto khuluvhe labour market intelligences lmi esteemed stakeholder 21 aug 2023 was not grante

- i receiving Allegation to saqa retain on.10 march 2023 procedure for evaluatiin pro forma invoice .copy id passport.copy final award graduation certificate. Copy of completed transcript

mark sheet academic record.proof payment if not meetings requirements can resubmitted again.non compliant; 27 july 2021 application above doe s not meet saqa

Final award school diploma degre certificate in 48h .

-that my requested letter to the authority minister for my result statement certificat over the date review n diploma 24 month.18 month nated examination to resolve problem after examination irregularities materiel that final result n4 and new re certificate body insurence investigation result center assessment outcome years icass total tvet for my institute st peace college institu and externsl certificate n1.n3 afric training institute and shalom technical collection print out was not in my application for diploma response from dhet submitted to resolve conflic assessment examination.

- Your sincerely.

Sign :Tshingombe Tshitadi

_____

An.n3 .in the relevant specialization area communication nqf level 4 in language teaching ...theor etical knowl2 and practical skills required and learning of institution offering. To be award the award qualification learners are to choose complete .business studies 0.5 years business studies.

.N4 o.5 year’s duration 60 cresits ...n5 (0.5 year duration) 60 credit .n6. 0.5 years duration 60. 18 month practical .in casev years duration engineering studies .n4 (0.33 years duration) 40 creditb. N5 (0.33 years duration) 40 credits .N6 (0.33 year duration) 40 credit ..24 momts practical experience.

N diploma 360 credit .180 awarded to experiential training business studie ..programme code n diploma engineering studie .electrical engineering. NQF qualification ID: 90674 .national engineering studies electrical engineering. NQF level 6; 360 credit credit . Saqa learning programme . N .

tshingombe fiston
<tshingombefiston@gmail.com>

Wed, Feb 7, 9:29 PM (5 days ago)

to **tshigombekb**, **maraba.a**, **lundt.s**, **tena.m**, **lutuka.m**, **president**, **esther.rammultla**, **modiba.d**, **dmandaha**, **callcentre**, **career help**, **registrarphei**, me

Appeal .process academics

Section

-Student Name:tshingombe tshitadi

-Qualification : saqa record academic institution name: foreign .st peace

-college name: st peace college

-Year of graduation:2020 to 2024

:management system information academic year: policy dhet ..policy number: saqa cat yet

Policy st peace college quality system manage qms

.lms

- referral registrar attandance :Record irregularities material transcript and script submission statement and evidence years 2022 ,11 months feb 2023 register roll academics college basic and advance nqf policy criteria

---

1.Letter record academic and transcript academic :

Consenting :asking to provide detail fir reasin course attended topics mark earner apply and refistrar keepinf record

.-FROM:TSHINGOMBE TSHITADI

TO: THE DHET DEPUTY MINISTER . MEMBERS OF ACADEMIC RECORD

SAQA AND COLLEGE RECTORAT INSTITUT

SUB : Dear : my name is tshingimbe and i attended event from to in there write to request for my transcript to apply for father adulation i wish to express my sincere gratitude to your education i wish to express my sincere gratitude to your dhet college thing which have helped me in my profession. I wish to take studies at foreign institut saga and college education advanced field continuing assessment professional institution has requirements a full transcript from my former studies to check my eligibility to studies the course i hope saqa to start my studie on and the dealnje to submit the the requested document is kindly send the

transcript at your earliest so that i an submit the documents on time i herbed provide my student identif6 number end of birbe you access my file quickly kindlt send the transcrip to my home please t .

-in effect of irregularities transcript material februarie 2022 need submission statement dhet full completion and finalise marks out term that honor for me to be part of this excellent institution since mention period feel proud and privileges to informer that due to the high standards of education imported by this institution secure institution workplace soon noining process i would be great ful to you if you colomb sending me the requested do i graduation years .

I hereby requested foil transcrip i eas students in journes from i graduate alumn of estemed successful career engineering experience cvs on line student research.

Section :

Ref: to maintaining record of academic achievement dhet .st peace college in saqa in order to maintaining acurate system student record lesson transcript student .

-student record: attendance dhet and nated years and saqa years entry national frameworks qualification award degre diplomat graduation. Enroll course in sty peace college.

-academics performance record keep track...studdnts progress formal and informal assessment .portofolio

Topics system

-Authors :tshingombe tshitadi: loyalty

Research pepper college system. Management

-methodology: description login topics and research topic college ‘son lines admit upload information student to view marks exam.

-advantages :the software verifications on line topics in trade national examination informal and poi s ices submitted on line framework qualification.nqf submitted information supplementary need to be record earn reward honestly ..

Result processing college need to try again and consol inspector information management systems

-consol textbooks n1,n6 permit consol fire script audit material exam scan over the time download need to be record registration storage restoration

- registrar next stepped record keeping earn reward honestly intellectual value credit challenges loyal compensation anted body frameworks qualification textbook cooking amendment pay information need reward return on line Microsoft database system collection and record process casebook basal book examination topics .reward need amendment R5000 copyright textbook exam pepper exam submitted need to returned explanation .textbook folding reviewers retrieve answering exam pepper need to be recording because students topics

framework challenge textbook answering textbook dissertation on line consol result statement.

Thank u for sincerely.

Weighting of courses

Certificate engineering studies / n diploma engineering	
Course in circular	Weighting of courses
Industrial electronics n1	
Engineering drawing n1	
Electrical trade theory n1	
Mathematics n1	
Industrial electronics n1	
Electrical trade theory n1	
Mathematics n1	
N2 SCALING PLACEMENT	
Industrial electronics n3	
Electronically trade theory n3	
Engineering science n3	
Electro- technology n3	
-Industrial orientation n3 -plant operation theory n3 -electro –technology n3 -electrical trade theory n3	

Electrotechnichnics n4	
Industrial electronics n4	
Enginering science n4	
Mathematics n4	

Certificate			
Courses in Curriculum	Census day enrolments	Credit value of the course	FTE student Total
Industrial electronics n1		0.33	1
Engineering drawing n1		0.33	1
Electrical trade theory n1		0.33	1
Mathematics n1		0.33	1
Industrial electronics n1		0.33	1
Electrical trade theory n1		0.33	1
Mathematics n1		0.33	1
N2 SCALING PLACEMENT		0.33	1
Industrial electronics n3		0.33	1
Electronical trade theory n3			

Appeal statement result .award degre diploma certificate n engineering studie

tshingombe fiston <tshingombefiston@gmail.com> Sat, Apr 6, 2024 at 11:02 AM

To: tshingombe fiston <tshingombefiston@gmail.com>, tshigombekb@gmail.com, maraba.a@dhet.gov.za, lundt.s@dhet.gov.za, tena.m@dhet.gv.za, lutuka.m@shet.go.za, "President Hotline(DPME)" <president@presidency.gov.za>, esther.rammultla@dst.gov.za, modiba.d@dhet.co.za, dmandaha@csir.co.za, callcentre@dhet.gov, careerhelp@dhet.gov.za, confirmations@saqa.co.za, verification@qcto.org.za, dfqeas@saqa.co.za, saqainfo@saqa.org.za, sonnika.s@dhet.gov.za

RE: Appeal statement result .award degre diploma certificate n engineering studie

Inbox

Lundt, Sonnika Thu, Mar 14, 7:19 PM

to me

Kindly note that Ms Maraba and I are no longer with the office of the Minister.

Kindly contact our call center: CallCentre@dhet.gov.za / 0800 872 222 or visit our website: www.dhet.gov.za

Best wishes

Mrs Sonnika Lundt

University Capacity Development

Department of Higher Education and Training

123 Francis Baard Street, Pretoria Central

Room 506_012 312 5440

lundt.s@dhet.gov.za

Incident INC000025277051 reported by you has been resolved. Request assistance from Dept of Higher Education and Training

Inbox

itsmprd@sita.co.za
<itsmprd@sita.co.za>

Tue, Mar 19, 12:52 PM

to

Dear Tshingombe Fiston,

We are pleased to inform you that your reported Incident has been resolved.

Reference No.: INC000025277051
Summary: Request assistance from Dept of Higher Education and Training

Your reported Incident has been resolved with the following resolution:
The N3 statement of results for 2100002023812 for the 2023/11 exam was released and sent to SHALOM TECHNICAL COLLEGE on 01/02/2024 waybill number 080057034873 (SkyNet couriers). Candidate does not qualify for a certificate as he did not pass all subjects. For a diploma to be awarded (as per the complaint), a candidate must achieve N4, N5 and N6 certificates and also have the relevant experiential work, then submit the application at the college. This candidate does not qualify for that. Complainant was responded to via an email.

Please do not hesitate to contact the Service Desk should there be any further questions or inquiries regarding your Incident. Please quote your assigned Reference Number.

Yours sincerely,

Service Desk

INC000025277051 PHL enquiry

Inbox

Nhleko, Gugu
<Nhleko.G@dbe.gov.za>

Tue, Mar 19, 12:39 PM

to
me

Good day

The DHET has received the below enquiry

Kindly note that according to the records for this profile 2100002023812, the results for 2023/11 were released and sent to SHALOM TECHNICAL COLLEGE on 01/02/2024 waybill number 080057034873 (SkyNet couriers). Candidate does not qualify for an N3 certificate as he did not pass all subjects.

For a candidate to be awarded with a diploma (as per the below complaint), they must achieve N4, N5 and N6 certificates plus relevant work experience then then may submit the application at the college.

Regards

Gugu Nhleko

Helpdesk

.....
.....
.....
.....

Complains about : Service delivery

Person / Ministry / Municipality: Department of Higher Education

Preferred contact number : 0725298946

Any other contact number : 0725298946

E-mail : tshingombefiston@gmail.com

Fax Number :

ID number : tircog0000910610

Ref number : ID: 2100002023812

Office where you complained :dhet exam assessment center irregularity and career dhet kheta

Street : : 19 Harries St, Marshalltown, Johannesburg, 2107

Building name : markadet house

City : Johannesburg

Office Contact Number : St. Peace College & Afric Policing Institut

Province : Gauteng

Date of complaint : 12 february 2022

Names of people not delivering service: st peace college afric institut police , dhet marker chief irrergularitor mr

Mngaka , rectorat shalom technical

Where did it happen town / site / municipality: in shalom technical college ansd afric training college

Type of service : service retaining statement id africa technical college and irregulariy trascript material febrauarie 2022 was suspende n4 examination time table , and marker in progress for n5,n6 afte 18 month appear before the result for n3 2023 november was exam july 2021 shalom technical result retain and dint collected for proof of irregularity was time table in november 2021 februarie , the marker asking additional information for assessment and statement to submitted but shalom and afric didn't have those statement in registrar collecting the irregulariy was attended n5,n6 final examination submission previouse pappers examination mark guideline and comleted n5,n6 test memo for irregularity investigation casebook in irregularity statemnt outcom and certificate diploma for irregularity outcom final

beford the result for 2023 november that the complain was also to show the id enrolment from citizen saqa award degre diploma school leaver dr congo time table ref / to completed same subject electrotechnologie , and industriel orientation meeting requiremnt saqa n3 to qualifie for diploma n studie engineeering in saqa n diploma work pratical experimental career from assessment theoretical topics research submitted for irregularity in saqa ,pratical assessment in saqa 21 days 2019 t0 2023

SAQA REGISTRAR STUDENT NUMBER: 210020223812, 2004007064382. CO70040101099, esult outcome primary status registration saga asset 09121 .saqa institute 30_ 39 no assess policy.IE099 ,saqa id 67q0 certificate advance phase teach .n1 saqa id 63375.id 67491 entrance

.n diplomat

Citizen is requesting about the release of results statement and to award a diploma.

Student ID: 2100002023812

Student name.tshingombe Tshitadi

College instituts name St peace college

Exam :external shalom technical :

899993812

Afric policing instituts

Memorandum :2023/0508

See attachment for more information

Citizen requests the Presidency to assist them

Exhibit career :

Ticket #Z1RNQ: Career Choice

Inbox

9160256+Z1RNQ@tickets.livechatinc.com Thu, Jan 11, 3:30 PM

to
me

Your ticket has been created.

Career Choice

tshingombe

Thu, 01/11/24 1:29 pm

Chat transcript:

Name: tshingombe
Contact number: 0725298946
E-mail: tshingombefiston@gmail.com
Gender Male
Are you a Student

Harriet Magolego (Thu, 1/11/2024, 01:40:55 pm Africa/Johannesburg)
Welcome to the Career Development Services LiveChat. How can we help you today?

tshingombe (Thu, 1/11/2024, 01:42:05 pm)
hi

Chat now

Powered by HelpDesk

9160256+Z1RNQ@tickets.livecha tinc.com

Thu, Jan 11, 3:30 PM

Your ticket is now solved! ## Career Choice Harriet Magolego Thu, 01/11/24 1:30 pm Good day Tshingombe Thank you for contacting the Career Development Servic

t

tshingom be fiston

Thu, Jan 11, 4:16 PM

Thank you for your assistance.

9160256+Z1RNQ@tickets.livechatinc.com

Thu, Jan 11, 4:16 PM

to

me

Ticket reopened

Career Choice

tshingombe fiston

Thu, 01/11/24 2:16 pm

Thank you for your assistance.

Harriet
Magolego

Good day Tshingombe

Thank you for contacting the Career Development Services (CDS): Helpline.
Please note that CDS offers information and advice on career and educational matters. The email is a chat follow-up which was not concluded but acknowledged. We apologise for the late response. Your profile indicates that you are a student. I wanted to make a follow-up to understand how you could be assisted. however, I have shared information regarding subject choice and career choice, Post school institutions and financial assistance.
Would appreciate if you could share with me more careers that you would like to know more about or that you would like to pursue, while doing that, please address the follow:
The grade your currently doing;
Your subject choice and;
Your academic performance.

Please note that choosing career is an important step which may determine how your life will be like in future. It is also important that you should take time to know yourself better in order to make an informed career choice. The process of making an informed career choice begins with creating your career vision, therefore it is a lifelong journey.

There are some important factors you should consider when making a career choice. That is your interests, strengths and abilities, values and personality, just to name a few.

It is therefore critical that you have the right information about the career that you are interested in. In addition, you need to think about the subjects you enjoy doing the most and consider your academic performance and achievements in your subjects.

You should know what you enjoy doing and what careers appeal to you. Please consider completing an interest questionnaire which will assist or direct you to the specific fields that are more suitable for you: http://ncap.careerhelp.org.za/login?ReturnUrl=%2fquestionnaire
Note that you will need to register as a user first and then continue with the exercise. Click on “Not Registered” to register.
The following links have more information on careers linking them to specific subjects as well exercises that you can take to assist direct your choices effectively:
• NCAP (Careers categorised in career/ subject field fields): http://ncap.careerhelp.org.za/Subject/StartWizard
• NCAP: http://ncap.careerhelp.org.za/Subject/Index
• NCAP Subjects linked to career fields: http://ncap.careerhelp.org.za/Subject/StartWizard
• Pace Career: http://www.pacecareers.com/resources/making%20subject%20choices.pdf
• Go Study: https://www.gostudy.net/img/author/326fdda6-55bf-4c1e-9c79-ded669886033/medium/subject-choice-project-for-grade-9.pdf?id=1b5f2681-cc09-4dab-8419-c5532852add2
• CareerPrep: http://careerprep.co.za/subjects/

Make sure that you are aware of all the post-school options available to you and how you can access them:

List of universities in South Africa, please check the minimum admission requirements form university prospectus or information booklet (Please check the closing dates as most universities will be closing around September /October):

http://www.dhet.gov.za/SiteAssets/New%20site%20Documents/Universities%20in%20South%20Africa1.pdf

Please find a list of TVET Colleges and check their courses, I would really encourage

you check the link as you will be able to pursue you studies at the College with low results in Mathematics:

http://www.dhet.gov.za/SitePages/Inst_TVET1.aspx

Please check the following websites links for possible funding opportunities:
Please note that NSFAS will reopen soon for 2024 academic year.
http://www.nsfas.org.za/content/
Other bursaries:
https://www.careerhelp.org.za/funding
https://www.gostudy.net/bursaries

Please find a list of TVET Colleges and check their courses.

http://www.dhet.gov.za/SitePages/Inst_TVET1.aspx

Kind regards
HM Magolego
Career Development & Open Learning
Email: CareerHelp@dhet.gov.za
TEL: 086 999 0123
123 Francis Baard Street
Private Bag X174
Pretoria 0001

tshingombe

Thu, 01/11/24 1:29 pm

Chat transcript:

Name: tshingombe
Contact number: 0725298946
E-mail: tshingombefiston@gmail.com
Gender Male
Are you a Student

Harriet Magolego (Thu, 1/11/2024, 01:40:55 pm Africa/Johannesburg)
Welcome to the Career Development Services LiveChat. How can we help you today?

tshingombe (Thu, 1/11/2024, 01:42:05 pm)
hi

Chat now

Powered by HelpDesk

to
me

Please take a moment to rate the customer service you've received.

Good, I'm satisfied
Bad, I'm not satisfied

Here's a quick reminder of the case in question:

Career Choice

tshingombe fiston

Thu, 01/11/24 2:16 pm

Thank you for your assistance.

Harriet Magolego

Thu, 01/11/24 1:30 pm

Congratulations, the job offer (99) Artisan-Electronics CT is extended to you!

Inbox

S

SARB Talent Acquisition <evra.fa.sender@workflow.mail.em2.cloud.oracle.com> Thu, Feb 8, 3:49 PM

to
me

Hello tshitadi tshingombe,

Congratulations, your job application was successful and we are pleased to extend the job offer (99) Artisan-Electronics CT to you.

We look forward to you accepting the job offer and joining this team.

Respond to Job Offer

Sincerely,
South African Reserve Bank Recruiting Team

t

tshingombe fiston Thu, Feb 8, 7:05 PM

I accept the offer.

t

tshingom Fri, Feb 9,
be fiston 11:30 AM

On Thu, Feb 8, 2024 at 3:49 PM SARB Talent Acquisition <evra.fa.sender@workflow.mail.em2.cloud.oracle.com> wrote: Hell

: Appeal statement result .award degre diploma certificate n engineering studie

Inbox

Lundt, Sonnika <Lundt.S@dhet.gov.za>

Mar 14, 2024,
7:19 PM

to
me

Kindly note that Ms Maraba and I are no longer with the office of the Minister.

Kindly contact our call center: CallCentre@dhet.gov.za / 0800 872 222 or visit our website: www.dhet.gov.za

Best wishes

Mrs Sonnika Lundt

University Capacity Development

Department of Higher Education and Training

123 Francis Baard Street, Pretoria Central

Room 506_012 312 5440

lundt.s@dhet.gov.za

From: tshingombe fiston <tshingombefiston@gmail.com>
Sent: Thursday, 14 March 2024 12:51
To: tshingombe fiston <tshingombefiston@gmail.com>; tshigombekb@gmail.com; maraba.a@dhet.gov.za; Lundt, Sonnika <Lundt.S@Dhet.gov.za>; tena.m@dhet.gv.za; lutuka.m@shet.go.za; President Hotline(DPME) <president@presidency.gov.za>; esther.rammultla@dst.gov.za; modiba.d@dhet.co.za; dmandaha@csir.co.za; callcentre@dhet.gov; CareerHelp <CareerHelp@dhet.gov.za>; confirmations@saqa.co.za; verification@qcto.org.za; dfqeas@saqa.co.za; saqainfo@saqa.org.za; sonnika.s@dhet.gov.za
Subject: Re: Appeal statement result .award degre diploma certificate n engineering studie

Some people who received this message don't often get email from tshingombefiston@gmail.com. Learn why this is important

Support

Thank you. Your question was successfully submitted to Microsoft Support.

Please keep in mind: microsoftsupport.com and microsoft.com are both valid email domains used for communications related to your support request.

Incident title:	engineering data portal
Support request number:	2403110060003192
Severity rating:	C

Expect response within:	8
Contact preference:	Email
Name:	Tshingombe Tshitadi
Email address:	tshingombefiston@gmail.com
Contact numbers:	0725298946

Thank you,
Microsoft Support

Additional Information

Product: Developer, Student and Startup Programs/Azure for Education/Licensing Information

This message from Microsoft is an important part of a program, service, or product that you or your company purchased or participates in. Microsoft respects your privacy. Please read our Privacy Statement.

One Microsoft Way, Redmond, WA 98052 USA

On Tue, Mar 12, 2024 at 2:52 PM tshingombe fiston <tshingombefiston@gmail.com> wrote:

Turn on more accessible mode

Skip to main content

Turn off Animations

Together Moving Post-School Education and Training Forward

- Home
- About Us
  - Minister
  - Deputy Minister

Isita back log project :

Reference ;

Certificate backlog: SITA, DHET, Umalusi; with Deputy Minister

Higher Education, Science and Innovation

18 February 2020

Chairperson: Mr M Mapulane (ANC)
Share this page:

Meeting Summary

DHET explained that certification backlog is defined as all eligible candidates who met the certification requirements but were not yet issued with certificates within three months from results approved by Umalusi. It reported to the Committee on:
• Progress and status of the certification backlog statistics
• Key obstacles to eliminating the certification backlogs
• Certification backlog Roll out Plan aimed at addressing the obstacles
• Update on progress of the new Integrated Exams IT System (IEITS)
• Challenges experienced in the development and deployment of the IEITS

DHET updated the Members on the Integrated Examinations Information Technology System (IEITS) that the DHET has been working on with a private service provider. Currently, system requirements and specifications for NC(V) L2 and NATED N4-N6 examination process have been documented and tested with the user community and Umalusi. The focus is now on the finalisation of the interfaces with key stakeholders such as Umalusi, SAQA, SITA printing bureau, Department of Home Affairs, Department of Labour and other departments. The deployment of the new

solution was planned to be implemented in a staggered approach per qualification over four months to ensure business continuity. It is envisaged that the deployment will now commence in August 2020. It has been moved from June to August due to comprehensive quality gates for Functional Acceptance Testing (FAT).

SITA informed the Committee that backlog reduction will be ramped up in the next few weeks. Besides the technology, SITA will appoint a dedicated programme manager with focused programme resources that will be cross utilised and rolled over to work on activities where quicker reduction benefits can be achieved. There are dedicated DHET and SITA officials that will be allocated to the Backlog Day Zero programme. There will also be swift dataset turnaround times by all stakeholders.

SITA projected that there will be about 80% reduction of the backlog by 30 June 2020. Looking at Phase One, this target would be achieved but it will certainly be complex. SITA required steady collaboration between DHET and Umalusi to make this possible and each stakeholder has been assigned its role in the business model.

Umalusi reported that it was at the end of the value chain amongst the stakeholders and therefore not responsible for the backlog. Its mandate is solely providing quality assurance and certification of datasets submitted by DHET. If the datasets submitted were correct, its turnaround times would be reduced significantly, otherwise the datasets are sent back for the colleges to correct.

Members asked how long the DHET has been using the 12 examination cycles and if it was possible for this to be reviewed; who exactly was responsible for the backlog; outreach campaigns on the certification process undertaken; why the CSIR was not appointed for the development of the IEITS; if SITA had an innovation partnership with CSIR; Umalusi turnaround times for consolidation of datasets; reasons for the seeming increase in backlog statistics; colleges failing to provide the data for certification; challenges in the legacy IT system; and if exam paper leakage had been resolved.

Members wanted to know who was responsible for the development of the IEITS; if DHET had capacity to deal with the data from Community Education and Training (CET) and TVET colleges for migration to SITA and Umalusi; why SITA was placed under administration; if SITA had the capacity to handle the Day Zero commitment and exam cycle turnaround times; if consequence management has been implemented for those responsible for the backlog. Members were not happy that the stakeholders had taken so long to solve the certification backlog and asked why the service provider contracted to develop the new system had taken five years.

However, there was satisfaction regarding the tangible commitments made and the timeline put in place to reduce the backlog.

Meeting report

The Chairperson noted that the Committee had visited the State Information Technology Agency (SITA) two weeks previously to get a sense of the certification backlog. The Committee and SITA agreed that answers would be provided today, particularly when Day Zero will come for the printing of certificates. The newly appointed SITA Administrator is also present and that is appreciated. SITA had been placed under administration since the start of the year.

Certificate Status: TVET, CET, Private Colleges: DHET briefing
Ms Violet Tshetlo, DHET Chief Director: National Examinations and Assessment (TVET, CET and Private Colleges), explained that certification backlog is defined as all eligible candidates who met the certification requirements but were not yet issued with certificates within three months from results approved by Umalusi. Thus anything after March constitutes a backlog for exams written in November/December. The Department runs 12 examinations cycles in an academic year. November and December are peak months for the certification process. She reported to the Committee on:
• Progress and status of the certification backlog statistics
• Key obstacles to eliminating the certification backlogs
• Certification backlog Roll out Plan aimed at addressing the obstacles
• Update on progress of the new Integrated Exams IT System (IEITS)
• Challenges experienced in the development and deployment of the IEITS.

The statistics fluctuate due to the following reasons:
- SITA is busy refining the scripts and system certification backlog.
- Instability of the examination information system to process the eligible candidates for certification.
- 2019 August exam cycle outstanding certificates have been included in the backlog totals as they now meet the certification backlog's criteria
- Candidates who had outstanding raw marks in the previous report to Committee which have since been summated by TVET colleges who are now eligible for certification are included in the totals
- Candidates who had irregularities in the previous report and have since been cleared by the irregularity committee and now eligible for certification are included in the totals

DHET spoke about the new exam system, the Integrated Examinations Information Technology System (IEITS) that it has been working on with a private service provider. Currently, system requirements and specifications for NC(V) L2 and NATED N4-N6 examination process have been

documented and tested with the user community and Umalusi. The focus is now on finalisation of the interfaces with key stakeholders such as Umalusi, SAQA, SITA, Print Bureau, Department of Home Affairs, Department of Labour and other departments. The deployment of the new solution is planned to be implemented in a staggered approach per qualification over four months to ensure business continuity. It is envisaged that deployment will now commence in August 2020. It has been moved from June to August due to comprehensive quality gates for Functional Acceptance Testing (FAT).

SITA commitment to Backlog Day Zero and its role in the New Exam System

Mr Vernon John, Head of Department: Administration – Acting at SITA, reported that the pace of reduction will be ramped up in the next few weeks. It will look much better due to the revised approach that has been adopted. SITA's approach included a multi-face approach with phase one looking at data analysis alignment. The phase 2 focus will be more on deep data analysis and cleansing, using a more modern technology. This is the work that will be done outside the historical system.

Besides the technology, SITA will appoint a dedicated programme manager with focused programme resources that will be crossed utilised and rolled over to work on activities where quicker reduction benefits can be achieved.

He noted that not everything will be resolved by the system and records that cannot be resolved by the system must be resolved through business solutions. The first prize will be Backlog Day Zero is achieved before the new system is implemented. There are dedicated DHET and SITA officials that will be allocated to the Backlog Day Zero programme. There will also be swift dataset turnaround time by all stakeholders and for resolving candidate records that have not been approved by Umalusi.

[See slide 7 for a target timeline diagram on Backlog Day Zero]

SITA projected that there will be about 80% reduction of the backlog by 30 June 2020. Looking at Phase One, this is going to be achieved but it will certainly be complex. SITA requires steady collaboration between DHET and Umalusi to make this possible and each stakeholder has been assigned its role on the business model (see slide 12 for DHET, SITA and Umalusi responsibilities).

The role of SITA in the new system includes:
- Providing advice and information on the current exam system to DHET service provider
- Extracting data from current exam system and make it available to DHET service provider to port it to the new exam system

- Hosting new exam system on the SITA cloud infrastructure, and
- Change management and training services.

SITA will not be rendering services such as system maintenance and enhancement services and functional application support services. However, SITA will ensure that there is proper governance at the ground level. SITA will report on a monthly basis to provide updates on the reduction of the backlog certification as Day Zero is looming.

In conclusion, Mr John said that SITA executives are committed to reducing the backlog in collaboration with DHET and Umalusi.

The Chairperson appreciated that they were now getting a sense of the commitments and Day Zero has now been announced and the Committee will be monitoring the status.

My Luvuyo Keyise, SITA Executive Caretaker and Accountability Authority, added that there are now 33 dedicated technical resources to get the job done. There is a new software solution which is basically an easier database to get the work done for DHET to stop talking about the legacy system. The data from the legacy system will now be migrated to the new database to clear the backlog. The commitment is that at least minimum two weeks before going live with each module, the backlog should have been cleared. This is because going live on the new system with a backlog will mess it up. The commitment is minimum two weeks but it could be a month or two months earlier. That is the monthly reporting that will be provided through the Department. The additional technical resources and the new database will make a big difference.

Umalusi on certification
Prof John Volmink, Umalusi Council Chairperson, noted that there had been some improvements in the past year, particularly in the quality of the question papers as well as the improved preparedness of the markers. This led to a better engagement during the marking guideline discussion.

On the certification mandate, Umalusi issues certificates to all deserving candidates. To this end each certificate must be issued with correct information. The grace period is allowed after the results have been released and during that period a candidate can enquire on their marks and re-checking of the scripts can take place and consolidation done to ensure that the correct marks are captured. It is after this process that certification process takes place.

In conclusion, Umalusi has entered into a new service agreement with the Government Printing Works to provide Umalusi with certificate background paper for the period up to 2021. So far, Umalusi has received 500 000

certificate background papers for and it is expecting another 500 000 at the end of February. The order for 2021 has already been submitted.

There are some challenges with some private colleges that have not been able to pay Umalusi for the certificates. These private colleges are not part of the backlog statistics. Individual candidates have an opportunity to pay Umalusi directly to receive their certificate. To resolve this problem, the college registration fees should include the certification fee to ensure students are not disadvantaged by the college being in arrears.

On the certificate backlog, Dr Eva Sujee, Umalusi Senior Manager: Qualifications, Certification and Curriculum, reported that Umalusi processes datasets when they are received and so there is usually no backlog on datasets received.

Dr Sujee stated that Umalusi must protect and ensure the integrity of the qualifications on the National Qualifications Framework (NQF). Stringent quality assurance measures are in place to ensure the quality of data. Umalusi will continue to process and quality assure all requests for certification with due diligence. Umalusi is committed to support DHET and SITA in solving the problems preventing the certification of candidates.

The Chairperson noted that the situation is now much better than when the Committee visited the SITA offices two weeks ago. He felt that the Committee was now getting clear answers on when Day Zero will come to fruition and how that process will be achieved. He thanked the SITA Administrator for the work that has been done so far.

He would like DHET to give assurance that come March and August 2021 the system will be deployed. He was worried that the system has been under development for a long time. It cannot take five years to develop a system that is bespoke for the certification backlog. He did not understand why it was delayed so much.

The Committee had scrutinised the Legacy Report of the previous Portfolio Committee. That committee was also concerned about this matter. He sought a firm commitment from the Department and advised that the service provider should be made aware of this so that there are no delays from the service providers' side.

Discussion

Ms J Mananiso (ANC) asked how long DHET has been using the 12 examination cycles and if it was possible for this to be reviewed. It has been identified as leading to the backlog. On slide 6, SITA has assisted in addressing the backlog challenges but there is misalignment in the presentation about who exactly is responsible for what. On slide 7, it seems

DHET is good at identifying problems but it moves at a very slow pace to resolve the problems. On slide 8, memos have been issued to colleges but it is unclear how the backlog will be dealt with at college level. There is a lack of outreach programmes and marketing to spread the word that certificates are available when dealing with the backlog. She asked if DHET had approached the CSIR when procuring the IT system. She asked if there are any partnerships with CSIR insofar as innovation. To Umalusi, she was concerned about the turnaround time for the consolidation of marks and asked about the turnaround time.

Mr P Keetse (EFF) said a disruption is when a learner or student fails to get their certificate for 25 years. There are new interventions that have been commanded but what often happens is that the officials coming to Parliament are not the same officials that are on the ground. Members should not be undermined in terms of knowing what actually happens on the ground. He questioned the capacity and its effectiveness to reduce the backlog. Based on the statistics, it seems that it has increased instead of decreasing. This is clear from the statistics provided.

Members were informed that has the capacity to print one million certificates in a day provided that DHET has provided the data. If that was the case, he did not believe that the backlog would have been a problem if the officials were being honest.

He asked which colleges were not providing the data required by DHET so certificates can be printed. On the legacy system, he asked if the problems with the system were systemic and how it is affecting the backlog.

Umalusi has come to the Committee before and submitted there was leaking of exam papers in TVET colleges. Mr Keetse believed this problem is still on-going. He asked to what extent paper leakages have been resolved, if it has been resolved?

Lastly, there should be a thorough diagnosis of where the problem really is. From the presentations, there is no accountability and clarity on from where exactly the problem comes. Officials were being ‘wishy-washy’ about the truth.

Mr B Nodada (DA) suggested that the Committee should invite Resolve IT to ascertain the delays in the implementation of the system. There are TVET colleges that have complained at ground level about the IT systems that they use to capture data. We speak of the Fourth Industrial Revolution but yet government departments cannot get the basics right such as system migration of data from one stakeholder to the other. Entities should not give the picture they think the Committee wants to see. The Committee needs to be told what the real problems are so that the next time the entities come,

the Committee is able to scrutinise them based on the real problems previously presented and if solutions have resolve those identified problems.

He asked about who is responsible for the examinations IT system. Does DHET have the internal capacity to deal with the certifications that come from CET and TVET colleges for processing before going to SITA and Umalusi? He asked Umalusi what the backlog is to consolidate the certification based on the records that it keeps since 1992. The same question applied to SITA.

He wanted to know why SITA was under administration and if there is capacity in ICT processing, primarily human capacity, to handle the four examinations cycle within the three months that had been indicated.

Lastly, what consequence management from all the stakeholders (DHET, Umalusi and SITA) has been implemented as far as where we are with the backlog?

DHET Response
Ms Aruna Singh, DHET Acting Deputy Director-General: Technical and Vocational Education and Training (TVET), said that the cycle has been in operation for a long time, as long as the qualification has been around. The only new cycle or qualification is the National Certificate Vocational. DHET has managed this over a long period of time.

On the communication and notification about certificates becoming available, this information is publicised where the interventions affect particular stakeholders. For example, DHET would publicise that students should go to the examination centres to get their certificates as opposed to the college head office, because the process requires you to go to the exam centre. The reason being is that doing this through colleges has borne a big gap, in some instances. Due to the lack of communication by colleges, DHET has been informed that some certificates have been at the exam centres for up to six months. Therefore, it is critical that the communication channels amongst the stakeholders are strengthened because it ends up affecting the students.

On the IT system procurement, even if the CSIR wanted to come on board it would have to do so through the bidding process due to the magnitude of the project and its cost. It went out on an open tender process and the CSIR was also eligible to bid.

In the November 2019 examination, there were no exam paper leakages and this was publicised.

As for sharing the blame, it is important to note that this process does require everybody to work together. However, between DHET and SITA, we can accept portions of the blame. Even if one segment of the process works perfectly, you would not get a certificate until the entire value chain had no loopholes.

Ms Tshetlo replied that DHET does have human capacity and has a dedicated team that will run with the qualification and they deal with the regions. That capacity is adequate for the current examinations and the current qualifications. However, that may not be the case in the future if more qualifications and examinations are added without adjusting the available capacity to cater for that.

As for CETs, the General Education and Training Certificate (GETC) qualification is run on an agency basis at the provinces and there is support from SITA. It is a collaborative effort between DHET and the SITA.

The ICT system for DHET was supported by SITA and it was based on the SITA main frame. It is run from SITA.

On the DHET procurement of the IT system, it was done through an open tender assisted by SITA. The service provider that was sourced came through that process.

SITA Response
Mr Keyise explained the increased certification backlog statistics on slide 6 of the DHET presentation, particularly on the National Accredited Technical Education Diploma (NATED): Engineering Studies. There was a 1 858 increase in the backlog. However, the statistics do not show within the four month difference when the date was extracted, how many of the new data was received and how many was reduced. The reduction, however, was not shown.

As for partnering with CSIR, both SITA and CSIR will soon come to the Committee and brief it on some of the innovative initiatives that the two are planning to partner in. CSIR has research capacity and SITA will report to the Committee on the research work planned ahead.

It is indeed true that the systems in DHET, TVET colleges, SITA and Umalusi do not really talk to each other. There is no simpler integration of the government systems. The business rules have not been cleaned yet in terms of making that possible; it is a legacy problem of government. Old systems are used but the business rules have not been changed to make life easier and we are now reactive in solving the challenge. It is not being solved holistically to ensure that once it is fixed from a departmental level, it trickles down to the TVET college level.

We are now going to move data from a legacy system into a new system that fits with the technology advances of today. This means that you can process the analysis of that data quicker and it can be done with minimal resources.

Broadly the partnership with CSIR speaks to applied research on 4IR in simple terms. We want to partner and see how we can develop a localised ICT research. SITA will also be working with CSIR to build a cyber security academy and ensuring that there are internal skills based in government to refrain from going to the private sector all the time.

On Resolve IT, SITA will also be analyzing why it took so long for the service provider to develop the system. SITA is not responsible and it is not playing any role in the implementation of that system. The system implementation is between DHET and Resolve IT. SITA's job is to ensure that the data is cleaned and managed and moved into that system. SITA will avail itself in assisting to monitor the new system implementation in addition to the 33 technical staff that SITA will be utilising. There is no contractual relationship at this point.

On SITA's capacity to print a million documents a day, the challenge is not on the printing side but receiving the data or results from the TVET colleges. SITA has given Umalusi a five-working-days turnaround time so that it can move ahead with the process.

Mr Keyise replied that he was not the right person to respond to why SITA was placed under administration. He was appointed after the fact but he would inform the Minister that the Committee had asked why the Agency was placed under administration.

On consequence management at SITA, this will be looked into but not for the implementation of the new system because SITA is not responsible for that.

Umalusi Response
Dr Mafu Rakometsi, Umalusi Chief Executive Officer, said that advocacy is something that is continuous at the organisation. He assured Members that he runs road shows throughout the country as well as career exhibitions. The Council receives a report on this matter of how Umalusi executes its advocacy campaign or mandate.

On the reduction of the turnaround times, the challenge is always about errors contained in the data submitted to Umalusi. If the data could be correct, the turnaround times would be significantly reduced. When it is not correct, Umalusi sends it back with reasons why the certification could not proceed.

The leakage of question papers is mainly an issue that ought to be dealt with by DHET not Umalusi. Umalusi is not the custodian of the question papers and it provides only quality assurance. Also Umalusi cannot verify a student unless the correct data has been submitted. Umalusi verifies the integrity of the data submitted for certification and it is at the end of the value chain of the certification process.

Umalusi relies on the quality of data that is submitted by the DHET and SITA. The organisation does not participate in the Department's operations or implementation of the system. Its responsibility is to certify the data submitted by DHET; therefore, it cannot make confessions about matters it is not responsible for.

Deputy Minister Response
Mr Buti Manamela, Deputy Minister of Higher Education and Training, said that addressing the certificate backlog is at the top of the agenda. DHET is always inundated about the delays in issuing the certificates. Secondly, DHET handles a number of examinations per year, as opposed to the Department of Basic Education which handles only one examination. So the point around Day Zero means that we can only address the backlog we have since the 1990s. However, there are challenges were people think they qualified and demand to be certificated. This is encompassed by all the other challenges.

Continual reports will be furnished to the Committee based on the set targets as we approach Day Zero.

The Chairperson said that he was happy with the Day Zero commitments. The Committee will hold DHET accountable for these commitments. He would have liked to see DHET making similar commitments as SITA had.

The TVET and Community Education and Training (CET) colleges are the most neglected in the Post-School Education and Training (PSET) sector. The universities seem to be the top priority.

3letter Explanation Theoretical Assessment Learne Application Course Topics Textbook
Page URL * https://archive.org/details/3letter-explanation-theoretical-assessment-learne-application-course-topics-textbook

Description * engineering letter assessment topics wok classe, letter experience

Subject Tags * letter assessment topics experience

Creator engineeri tshingombe

Date 2024-06-25

Collection * Community texts

Test Item No

Language English

License Creative Commons Attribution-NonCommercial-ShareAlike

More Options Add additional metadata...

: (remove)

Drag and Drop More Files Here or

Name	Size	x
3letter explanation theoretical assessment learne application course topics textbook.docx	8.5 MB	
2 ltter tshingombe self asseme Incident logged on 2024.docx	3.7 MB	

Incident logged on 2024, supplie letter tendered.docx

3letter Explanation Theoretical Assessment Learne Application Course Topics Textbook

by

engineeri tshingombe

editEdit gearManage timeHistory

Publication date

2024-06-25

Usage

Attribution-NonCommercial-ShareAlike 4.0 International

Topics

letter assessment topics experience

Collection

opensource

Language

English

this item is currently being modified/updated by the task: book_op

engineering letter assessment topics wok classe, letter experience

Addeddate

2024-06-26 10:16:17

Enginee

60000

Identifier

3letter-explanation-theoretical-assessment-learne-application-course-topics-textbook

Scanner

Internet Archive HTML5 Uploader 1.7.0

plus-circle Add Review

Reviews

There are no reviews yet. Be the first one to write a review.

0 Views

DOWNLOAD OPTIONS

download 1 file

TORRENT download

download 3 files

WORD DOCUMENT

download 7 Files
download 7 Original

SHOW ALL

IN COLLECTIONS

Community Texts

Uploaded by Rdferz on June 26, 2024